



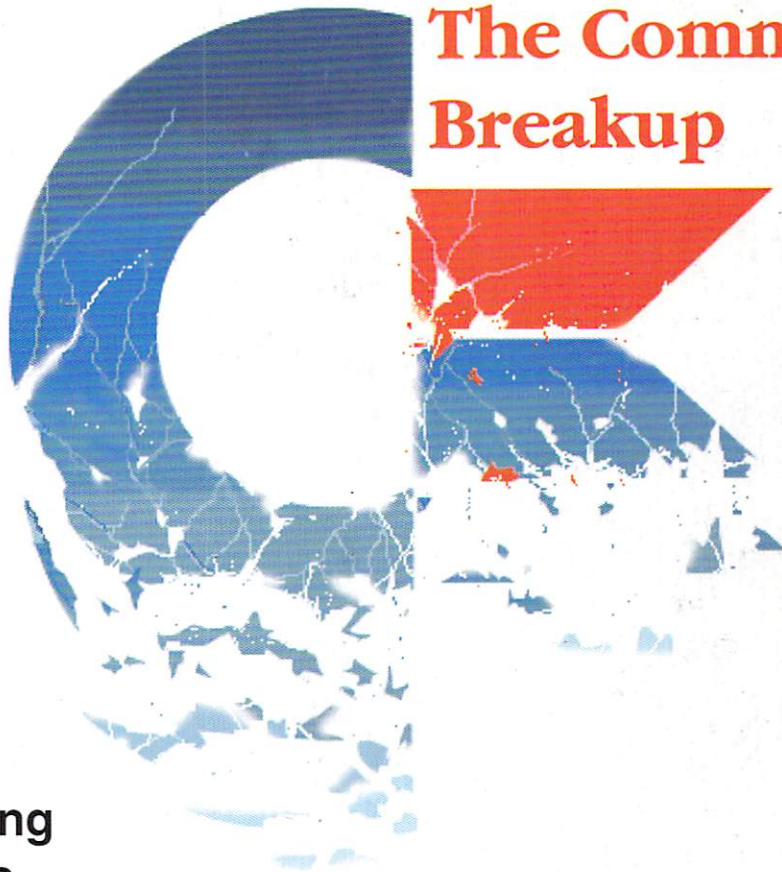
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For The Commodore

Volume 9 No. 7 July 1994  
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## **The Commodore Breakup**

### **Reviews**

- **Brilliance 2.0**
- **Cocoon Morph**
- **FinalWriter 2.0**

### **In This Issue**

- **Digital FX:**  
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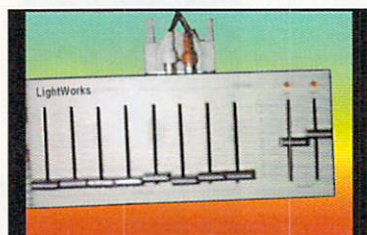




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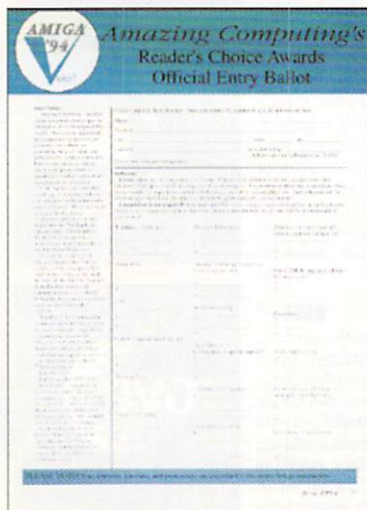
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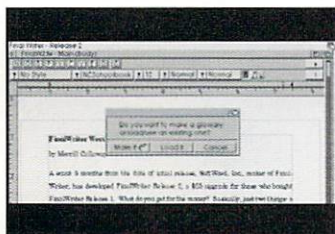




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## And furthermore...



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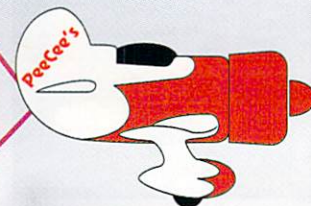
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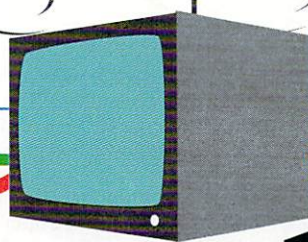
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# EDITORIAL CONTENT

"There is nothing wrong in change if it is in the right direction. To improve is to change, so to be perfect is to have changed often."

Sir Winston Churchill

Last month, when I discussed the current trials and tribulations of Commodore, I said it felt as if we were experiencing an intermission during a Shakespearean play. Guess what, no one has started the show yet and this may be the biggest problem for all Amiga users.

Commodore has never been known for their ability to arouse public support. They have never been noted for their ability to turn lemons into lemonade. But, they have been known to take a bad situation and create a disaster. At least there is some satisfaction in noting their consistency.

## Hock Tan, Where Are You?

Mr. Hock Tan is the financial officer for Commodore International. His offices are in West Chester, PA, where many parts of the international controlling company for Commodore exist. Mr. Tan is also the official spokesperson for Commodore. He is the only person who is allowed to discuss Commodore's position or options. Unfortunately, Commodore has apparently given him this role and then instructed him not to speak.

*Amazing Computing* has been calling his office for any sort of comment for more than two months. Calls are placed on an almost daily basis. However, Mr. Tan has yet to return a single phone call. No one at Commodore International has offered an official statement or even the courtesy of a "no comment".

This is not just a blackout of Amiga magazines or even just *Amazing Computing* (thank you, Bandito). Since Commodore made their liquidation announcement, our offices have received a number of calls from news reporters around the country. They all need background from Commodore and Commodore is not talking.

Certainly these are trying times at Commodore. The efforts of the individuals to keep a project going under an uncertain future such as Commodore's must be very frustrating. Yet, while it is easy to sympathize with Mr. Tan's position, his lack of effort has caused Commodore to once again make matters worse.

## The Press

At least two major papers have published stories on the demise of Commodore, *The Los Angeles Times* and *The Washington Post*. In both cases the editors have seen the wit in saying "Adios Amiga" in their headlines. It did not matter that in both

cases the stories discussed buyers for the Amiga and its future technology. The chance to run a catchy headline instead of a correct one apparently was too great.

In the case of The L.A. Times article it is understandable. Its author, Richard O'Reilly, obviously had a basic understanding of the Amiga and its technology. However, he apparently did not understand the difference between the Amiga and its competitors. The price performance or even the adaptability of the Amiga system was shunned as he noted, "Its video features are already available on specialized add-in boards for the Macintosh and the PC, so the industry it created will live on without it."

We honestly cannot blame these reporters and editors for these slants. They are not Amiga owners. Their job is to get the story from "reliable sources" and present it to the public. And most of these writers will head to the sources they trust most.

In the case of the original Associated Press story, they quoted an editor for a PC newsletter. From the comments quoted, it was apparent that the gentleman had very little hands-on knowledge of the Amiga or its capabilities. And, since this was the first story generated on the problems of Commodore, the errors continue to multiply.

## Checks And Balances

Normally in a case like this, it is up to the writer to get as many different sources of information as possible and present an overall and balanced report to the public. In the case of the two stories mentioned, there were never any comments from Commodore. The only pro Amiga information available was supplied by Amiga dealers and owners.

Commodore's continued silence could seriously jeopardize the Amiga market and the value of the Amiga technology in general. However, Commodore's corporate vision has never been focused beyond its own thin walls.

## What Is At Stake?

In this issue, we have printed several releases from Amiga vendors who have sworn to continue their support for the Amiga market. Blue Ribbon Soundworks, SMG, CEI, Amigaman, DKB, and more have made a commitment to the Amiga market to continue their work. I am certain that there are many other vendors who have also decided to continue supporting their Amiga customers.

The problem is that the industry also needs to hear from their customer base. Early reports have shown Amiga dealers and distributors are doing a good business as consumers have been buying in increased quantity. The problem is that the vendors may not all be receiving this news.

Last July, we published a phonebook containing the address and telephone numbers of over 600 vendors. *AC's GUIDE* for Summer '94 has just been mailed to all subscribers and is on dealers shelves now. With these two resources, the Amiga community has an excellent opportunity to once again contact Amiga companies, show them their support, and offer suggestions on continued product.

## Why Bother?

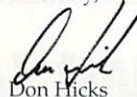
As I stated last month, the Amiga technology is too valuable to be ignored. Whoever buys this technology is going to want to get the most they can from it. This means they will need to support the full line of the Amiga. Even if a large company only wants the Amiga for just a portion of its capability, they will still be open to someone licensing the technology and continuing the line as well as the research and development.

With Commodore's continued "cone of silence", it once again falls upon the Amiga community to sustain the Amiga market. It is our responsibility to make sure the coverage of the Amiga remains accurate and that the market maintains its energy and direction.

The good part about all of this is that Commodore should soon be out of the Amiga market, which is the best news the Amiga market has ever had. The Amiga has always relied heavily upon the shoulders of its users. They, more than anyone else, continued the viability of the Amiga long after the "marketing heads" and "industry observers" had written it off.

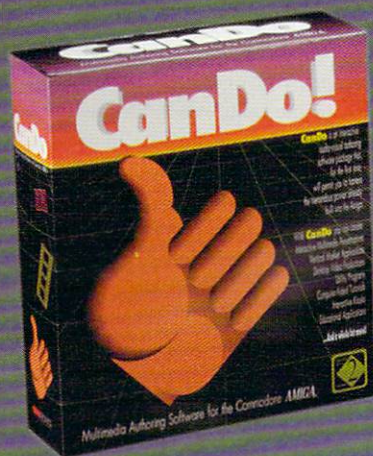
The Amiga sincerely has its best opportunity ever. Anyone picking up the Amiga is bound to want to support it more heavily than it has been supported in the past. Making that worthwhile, as always, is in the hands of the people who know it best, the Amiga community.

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Managing Editor



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Called, the Wicked One, the villain is a true paranoid seeing enemies everywhere. He has had a huge machine built to metamorphose all who oppose him. Most of the Tinies on Sklumph during the takeover have been reduced to a mindless state, while the rest are aggressive nomadic beasts.

The returning Tinies immediately help by putting their natural abilities to work. These include swimming (above and under water), throwing balls of fire, using a rope (to move about and grab objects), and even eating some elements of the scenery.

Only you can help the true Tinies regain control of their planet by guiding them through

over a hundred levels of Sklumph. A current game can be saved but you will need a free slot in your CD<sup>32</sup>'s non-volatile RAM. After every five levels your game will automatically be saved. There is also a Pause/Resume option. The manual has instructions in English, French, German, Italian and Spanish. The game is distributed by Mindscape, 60 Leveroni Court, Novato, CA 94949, (415) 883-3000, Inquiry #234.



### Super Methane Brothers.

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Puff and Blow must defeat all of the key Keeper's minions which appear on every floor within the time allotted, using power-ups and other useful objects to help them on their way. They must also find the four fragments of the Golden Key of Doom, which is guarded by the Key Keeper in his various guises. The final piece of the Key is awarded when the Key Keeper is defeated in the final conflict in the bell tower. Apache Software Ltd., First Floor, 42 North Road, Sleaford Lincolnshire, England NG34 7AW, Tel (0529) 302100, FAX (0529) 305400. Inquiry #235.



### Brutal Football

This is an all action, no holds barred game of mutant football combat where heads will roll and injury time means just that. This is football with a new set of rules, NO RULES! It is a one or two player game with four breeds of rock hard players. There are two ways to win, either out score the opposition or slaughter six out of seven of their players. Each game lasts seven minutes and once it begins there are no rules. If the game ends in a tie, the ball is eliminated and injury time is played. This is a fight to the death with the first person to kill six opponents winning.

There is a league game mode in which you can set up conference play and keep statistics for each team. There is even a locker room where you will see your players in various states of disrepair. Your job here is to try and return your players to match condition and have them ready for the next

game. The manual is written in English, French and Italian. Millennium Interactive Ltd, Quern House, Mill Court, Great Shelford, Cambridge CB2 5LD UK, Customer Support (0223) 846023, Inquiry #236.

### Dangerous Streets

The greatest fighters on Earth are ready for battle. These 8 mighty challengers each have their own unique death winning Special Move. Only the meanest fighter can survive these Dangerous Streets. The game features 8 fighters who know no mercy; easy, normal, hard plus speed options; sharp graphics and slick animation; head to head or computer combat; thundering MIDI sound track; and specially enhanced AGA. Try the tournament mode to see if you can become boss of the streets. Flair Software, Meadowfield House, Ponteland, Newcastle, England NE20 9SD, Inquiry #237.



### Fire & Ice

Glemm has tracked down the escaped wicked magician, Suten. Suten is on Earth and he must be stopped, but Glemm needs a local hero, Cool Coyote.

In rapid arcade fashion, Cool Coyote must jump, run, and battle his way from the frozen North to the blazing South. Using ice pellets, airbombs, rain clouds, shields, and "the Sonic Bark." Secret exits, secret lands, multiple countries, and a variety of difficult antagonists populate this busy test of intelligence and skill. By Graftgold, Published by Renegade, C1, Metropolitan Wharf, Wapping Wall, London, England E1 9SS, Inquiry #238.

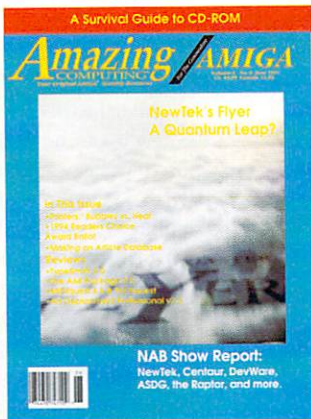


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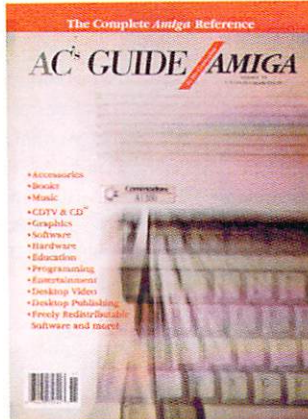
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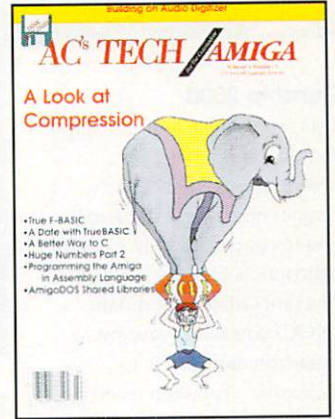
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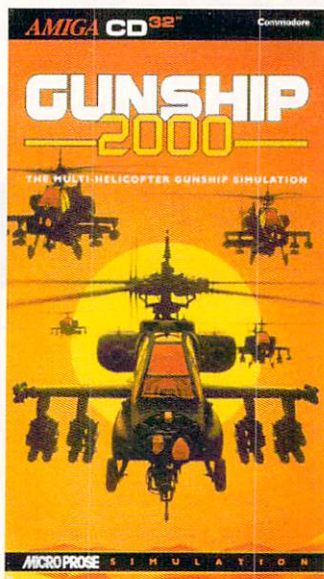


***AC's TECH*** was the first disk-based technical magazine for the Amiga. This quarterly collection of programs, techniques, and developer issues has been created for Amiga owners who want to do more with their Amigas. If you want to expand your Amiga knowledge beyond the ordinary, then ***AC's TECH*** is a must.

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### Gunship 2000

This multi-helicopter gunship simulation is a detailed presentation of helicopter combat operations, allowing you to control up to five distinct helicopters. Starting out as a Warrant Officer Candidate (WOC) you select your own squadron and give it a nickname. You then receive the necessary training you will need for helicopter combat.

When you complete this phase you are promoted to Warrant Officer (WO1) and graduate to single Helicopter Missions. You are now in command in one of two theaters against opposing forces in a variety of missions. Success here will earn you the rank of commissioned officer which then opens the door to the endless variety and challenge of Flight and Campaign Missions.

In Flight Missions you are in charge of 5 helicopters. How

you employ your own copter in conjunction with the other four will determine your success or failure. The Campaign Mission puts you and your crew in continuous combat mode. While you cannot win the campaign on your own, your success or failure does have an impact on the ultimate outcome. MicroProse Software, Inc., The Ridge, Chipping Sodbury, Bristol BS17 6AY UK, Tel (0454) 329510 Inquiry #239.



### The Ryder Cup

Ryder Cup golf contains all the tools necessary for a good match. You can analyze every course, every hole and every shot. Detail is the key as you match your efforts with a high calibre of players.

The mechanics of the swings from the tee to green have been closely studied and replicated for realism. The incredible detail of the courses make you feel as if you were actually there. The manual written in English, French, German and Italian gives a good overview of the history of the tournament. Matches include Fourball, Foursome and Singles play and can be set for combinations of morning and afternoon games. The computer can also keep detailed scores on all matches in progress for each day. Ocean of America, 1855 O'Toole Ave Suite d-102, San Jose, CA 95131, (408) 390-9600, FAX (408) 954-0243. Inquiry #240.

### Special Thanks

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### Mr AMOS Club Programmers Pack

The PLAYFIELD! AMOS programmers group is distributing the new Mr AMOS Club Programmers Pack here in the United States (\$29.00). The Pack comes from the Mr AMOS Club, an extremely popular AMOS club from the UK. M.A.P.P. is a large 7 disk collection of AMOS and AMOS Professional public domain programs. Over 500 programs are included and cover many areas an AMOS programmer will need. Demos, Converters, rainbow makers, animation systems, string bank creators, IFF viewers, drawing programs, starfield creators, vector makers, sinus scrollers and a great deal more are included, all in AMOS source code to learn from. PLAYFIELD! PO Box 450884 Sunrise, FL 33345-0884, (305) 846-7969, Inquiry #210.



A Rose by  
Any  
Other Name

### ASDG is now Elastic Reality.

ASDG, a prominent Amiga hardware and software developer has adopted a new name. The metamorphosis is effective immediately. ASDG, Inc. is now Elastic Reality, Inc. Their address and phone number remains the same. Elastic Reality, Inc., 925 Stewart Street, Madison, WI 53713, (608) 273-6585, Inquiry #209.

### SCSI from your IDE

The DataFlyer SCSI+ is a SCSI 16 bit controller that offers great performance at an attractive cost (\$129.95 for A1200, \$149.95 for A4000). Users can now operate SCSI devices and their original IDE/AT drive at the same time. The DataFlyer SCSI+ allows the user to attach SCSI drives, SyQuest removable drives, CD ROMs, Flopticals

and tape backup systems. The A4000 model mounts directly onto the IDE/AT header, the A1200 version mounts internally directly on the IDE/AT header with no need to remove the shield. As it does mount directly onto the IDE header, it cannot AutoBoot. This can only occur from the CPU slot. The DataFlyer will AutoMount from the existing IDE harddrive or from the booting Workbench disk. Expansion Systems, 44862 Osgood Rd., Fremont, CA 94539, (510) 656-2890, Fax (510) 656-5131, Inquiry #208.

### Amiga Assembler Insider Guide

This guide has been written for the new user who wishes to learn to write programs in the native code of the Amiga computer - Assembly Language (£14.95). Practical results are achieved through short examples which demonstrate different programming skills. Each program in the book can be assembled and run in under one minute. This is programming for the novice, made all the easier through the mini Insider Guides which summarize important operations and fundamental concepts. Bruce Smith Books Ltd., 106 Smug Oak Centre, Lye Lane, Bricket Wood, Herts, AL2 3UG United Kingdom, (0923) 893493, FAX (0923) 894366, Inquiry #211.

### mediadesk Announces Two New Amiga Tools: Cinema 4D

Cinema 4D is animation software designed for the ambitious Amiga-users at home and in expanding professional environments, who need to create photo-realistic 3-D graphics and animation for presentations, video productions and multi-media (\$198.00). This complete 3-D modeling, rendering and animation package runs on all Amiga models (A500-A4000) with at least 1.5 MB of RAM and OS



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With over 5 million Amiga's already sold and 1000's more every day, 1994 is the year of the Amiga! Commodore has the biggest and best line-up of Amiga's ever! From the world's first 32-bit CD game console to the new 4000 Tower, the Amiga family is more impressive than ever! Price, performance & features unmatched by Apple or IBM!

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<b>Amiga 4000 / CD-ROM!</b> - Amiga 4000 Computer - 130 MB Hard Drive - Built-in Double Speed CD-ROM! - Includes SleepWalker & PinBall <b>\$1,569</b> - 4000/030 & CD-ROM \$1569 - 4000/040LC & CD-ROM \$1869 - 4000/040 & CD-ROM \$2169 - 4000 Tower & CD-ROM \$2469 The Ideal Multi-media system. Capable of reading ISO-9660 (IBM), Photo-CD (Kodak) & CD-Audio discs, it will also run most CDTV & CD-32 Titles!	<b>Amiga 4000 @ 40Mhz</b> - Amiga 4000 Computer - 68040 CPU @ 40Mhz - 8 MB RAM (exp to 146 MB!) - 340 MB Fast SCSI-II Hard Drive - The Fastest Amiga Ever Built! <b>\$3,099</b> The most powerful Amiga ever offered! This system has a powerful 68040 CPU at it's heart running at 40 Mhz. The built-in Math chip can crunch through 3D renderings literally 400 times the speed of an Amiga 500, reducing rendering time from days to minutes. If you have always wanted to create pictures & animations like you see on TV, this is the system capable of doing it!	<b>Toaster 4000 Starters</b> - Amiga 4000 Computer - 10 MB RAM - 130 MB Hard Drive - Toaster 4000 Card Version 3.1 <b>\$3,699</b> - 4000/030 & Toaster \$3699 - 4000/040LC & Toaster \$3999 - 4000/040 & Toaster \$4299 - 4000 Tower & Toaster \$4599 The most affordable Video Toaster systems ever! Now the power of the New-Tek Video Toaster is within reach of more users than ever!	<b>40 Mhz Toaster 4000!</b> - Amiga 4000 Computer - 68040 CPU @ 40Mhz - 20 MB RAM (exp. to 146 MB!) - 540 MB Fast SCSI-II Hard Drive - Toaster 4000 Card Version 3.1 <b>\$5,699</b> At 40 Mhz, this is the most powerful Video Toaster ever! Longer animations than ever before are possible with 20 MB of RAM! Lightweight renderings have never been faster, with 60% more processing power than regular 4000's. The hard drive is as fast as they come, thanks to the built-in Fast SCSI-II interface and all this still leaves room for TBC Cards!	<b>Personal Animation System</b> - Amiga 4000 Computer - 14 MB RAM - 550 MB & a 130 MB Hard Drive - Personal Animation Recorder Card <b>\$3,599</b> - 4000/030 \$3599 - 4000/040LC \$3999 - 4000/040 \$4299 - 4000 Tower \$4599 These systems will produce 60fp, broadcast quality animations up to 5 minutes long and play them directly from the 'PAR' Card in true 24-bit!
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<b>Painting, Animation, Music &amp; Video Software</b> Anim Workshop Version 2.0 (A MUST!) \$99 Deluxe Paint 4.5 (AGA Version!) \$109 Disney Animation Studio \$29 Brilliance Paint & Animation (24 Bit on AGA!) \$79 Caligari 24 (The fastest rendering program ever) \$119 Real 3D version 2.0 (Collisions, Gravity & Wind!) \$379 Imagine 3.0 (Brand New Version! Now In Stock!) \$379 LightRave 3.1 (Lightwave Emulator) \$339 Sparks (Particle Animation for Lightwave) \$99 T-Rex Professional Version 2.1 (for Toaster) \$119 Swipes (for Video Toaster) \$89 Art Department Professional (AdPro Version 2.5) \$139 Montage (The ultimate Character Generator) \$225 Pegger (on-the-fly IFF picture compression!) \$69 Bars & Pipes Professional Version 2.0 \$215	<b>Final Copy Word Processor (with spell checker)</b> \$39 Pro Calc (Probably the best Amiga spreadsheet) \$109 ProPage 4.1 (The standard in Amiga Publishing) \$75 ProDraw 3.0 (Full featured structured Drawing) \$75 <b>We've got it at the lowest price!</b> <b>Brilliance only \$79</b> (Regular Price \$219, Supplies limited to 26)	<b>Accelerators &amp; Memory Boards</b> Warp Engine 4028 (28Mhz & SCSI-II for 4000/040) \$719 Warp Engine 4033 (33Mhz & SCSI-II with CPU) \$1189 Warp Engine 4040 (40Mhz & SCSI-II with CPU) \$1389 GVP 1230, 68030 @ 50Mhz (OMB & no FPU) \$499 Amiga 1230, 68030 @ 40Mhz (OMB & no FPU) \$325 Amiga 1230, 68030 @ 33Mhz (OMB & no FPU) \$375 CSA 12 Gauge (33 Mhz) with SCSI (OMB/OFPU) \$429 CSA 12 Gauge (50 Mhz) with SCSI (OMB/OFPU) \$559 MBX 1200z Style RAM Board with 1MB RAM \$139 4MB SIMM for Amiga 4000's, MBX1200z, etc. \$157 50 Mhz 68882 FPU for 4000/030 or 1230 Boards \$98	<b>Monitors</b> Commodore 1950 Multiscan \$299 / \$399 Commodore 1960 Multiscan \$339 / \$439 Commodore 1942S MultiScan w/Stereo \$349 / \$449 <b>We've got it at the lowest price!</b> <b>Supra 14400 Modem \$139</b> (Regular Price \$229, Supplies limited to 18)
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\* Two many people could not read it, so we made the fine print even smaller. The US\$ prices shown are based on the US\$ Canadian exchange rate as of add creation, and are shown for comparison purposes. Since we are a Canadian company, transactions are in Canadian funds. If you are not Canadian, your bill will automatically convert to foreign funds when you place an order and we authorize your card, therefore, actual prices may vary slightly (usually less than 1/2%). If this is unclear, please ask for details. Saskatchewan residents add 7% Provincial Sales Tax & Canadian residents add 7% G.S.T. You do not get charged any other taxes, tariffs, duties or fees. This add reflects products & pricing available to us as of April 29, 1994. By the time you read this add in the July 94 issue, some things probably will have changed, for better or for worse. If you are not guaranteed. There will be a 15% restocking fee on orders refused/returned (except of course for defective items returned for repair or exchange). All equipment is NTSC/110 Volt / 60 Hz so it will work fine anywhere in Canada/USA/Mexico. While we do our best to maintain good inventories of the products advertised, some items are very popular and demand exceeds supply, so call order early! Items temporarily out of stock will be special ordered and shipped when available. If any of this is unclear, please ask for details before ordering. Sorry, but we can't be responsible for damage, delays or loss during shipping, so please insure your order.



versions 1.3 and higher. Graphic cards are supported. Cinema 4D also reads all major file formats such as Imagine, Reflections and DXF. Available by August 1, 1994.

### DesktopMAGIC 2.0

DesktopMAGIC 2.0 is a unique, practical screensaver which combines the power of graphics, animation, music, and sound effects (\$39.95). The user can choose from over 25 screensaver modules and combine them with over 60 sound effects. Makes full use of the Amiga's graphic and sound capabilities while preventing phosphor burn-in. Easy installation using Commodore Installer. Phone and e-mail support. Comes on 3 disks which run on all Amiga systems from OS 1.3 and higher and is fully compatible with graphic cards. mediadesk, 1875 South Bascom Ave Bldg 116 Suite 204 Campbell, CA 95008, (800) 30-mdesk - Sales, (408) 374-7595 - Tech Support, (408) 374-7596 - FAX, Cinema 4D, Inquiry #212, DesktopMAGIC 2.0 Inquiry #213.

### Add Inexpensive PC Bus Power to Your Amiga—GG2 Bus+

The GG2 Bus+ (formerly GoldenGate II bridgcard) lets you add IBM-compatible hardware to your Amiga (\$199.95 plus S+H). The most common additions are extra parallel and serial ports, and network cards. The GG2 Bus+ supports almost all non-DMA AT-compatible (8MHz bus capable) PC plug-in boards, IDE hard drive controllers, non-DMA ethernet boards, VGA boards, A/D boards, etc. Access to the PC cards is at full Amiga Zorro II bus speed unless wait state support is turned on. The following drivers are included: ibmsr.device, ibmprint.device, ibmIDE.device, NE1000.device,

NE2000.device (the last two are SANA-II ethernet drivers for the Novell NE1000 and NE2000 boards and compatibles). Since the Ethernet drivers are SANA-II compliant, you can use your GG2/Ethernet combination with all of the popular network packages. GG2 Bus+ can be used with software-based MS-DOS emulators. Software Results Enterprises, 2447 N 4th St Ste B, Columbus, OH 43202-2706, (614) 262-9146, FAX (614) 267-2683, Inquiry #215.

### Video For Amiga Beginners

#### Amiga Workbench 3 Basics Tutorial Video

This video is the ideal introduction to the graphical user interface which all users of the A1200, A4000 and A3000 use to operate their computer (£14.99 inc VAT). The complete beginner will appreciate the step by step examples on all subjects, from formatting disks to using the Preferences tools. Floppy disk and hard disk machines are catered to. Great animations help to increase the viewer's understanding of the concepts involved. Picture in picture display means that the presenter can demonstrate mouse and keyboard actions while the changing computer screen remains in view. The video is over 1 hour long and, of course, the viewer can rewind to check important actions over and over until learned and the tape can be reused at any time for reference. Bruce Smith Books Ltd., 106 Smug Oak Centre, Lye Lane, Bricket Wood, Herts, AL2 3UG United Kingdom, (0923) 893493, FAX (0923) 894366, Inquir #214.

#### Adding The Human Touch

LightWave Organic Modeling Motion Blur Publishing has announced the publication of its second book of tutorials for users of 3D graphics software. It is a concentrated course in the use of LightWave Modeler's Spline Curves and Patch

features. Starting with a simple four-sided figure, the tutorials proceed to creating different types of 3D patches including a stylized rocket nosecone and a pair of harlequin lips. The final project involves creation of a seamless human hand, after which, Motion Blur asserts, the user will have the confidence and ability to create any type of organic shape. The book is the first volume in the LightWave Power Tutorial Series; future volumes will cover animation, texture mapping, and other topics. Motion Blur Publishing, 915A Stambaugh Street, Redwood City, CA 94063, (415) 364-2009, Inquiry #217

### Roll The DICE Famous Freeware C Goes Commercial DICE 3.0

Obvious Implementations Corp., Inc announced a new C Compiler system for the Amiga. DICE 3.0 is based on the popular freeware compiler of the same name. Its focus is on productivity with a fast turnaround, a visual programming environment, and featuring seamless integration with any editor. The help system can return information on any library function, structure or AutoDoc in under a second. Error handling is fully integrated with your editor. Source to most of the libraries is included, as well as many examples to help beginners get started programming in C and programming the Amiga. DICE is only \$150, students and SAS/C owners pay only \$95. Owners of the registered version pay just \$75, students who own the registered version pay just \$65. Add \$8 for international shipping. Obvious Implementations Corp., PO Box 4487, Cary, NC 27519-4487, USA (800) 761-2042, (919) 859-7407, Inquiry #216.

### Add To Your Toaster Capability!

#### Toaster Toolkit 4000

Promising to break all barriers for harnessing creative control over the NewTek Video Toaster Environment, Toaster Toolkit 4000 works with Video Toaster versions 2.0, 3.0 and 4000 systems. Its six powertools include - Toaster Sequence Editor, Toaster Project Editor, Color Font Converter, ANIMtoFX, FXtoANIM, and FrameStore Compressor. The Toaster was designed to let you have interactive control over it, but AREXX programming skills were a must. Toaster Toolkit 4000's Sequence Editor changes all of that, allowing you to create, execute, save and manipulate sequences graphically...easily! All AREXX commands are shown in plain English., DevWare Inc., 12520 Kirkham Court Ste 1, Poway, CA 92064, (800) 879-0759, Inquiry #218

### Real Time Animation Improved

#### Magic Lantern Version 1.5

Terra Nova Development announced that Magic Lantern version 1.5 is now shipping (\$95.00). All registered users of previous versions will receive an upgrade disk to 1.5 automatically. Magic Lantern allows users to create, edit and display animations in real time in up to 16 million colors on a variety of display cards and all Amiga display modes (including AGA). Some of the new features include support for EGS animations in 8,16 and 24 bit in all resolutions, support for the GVP Spectrum card, stereo sound, faster Workbench 3.0 double buffering and much more. Other Magic Lantern features include: synchronized sound support, enforcing a frame rate, hard disk playback of animations and editing existing animations. Terra Nova Development, PO Box 2202, Ventura, CA 93002-2202, Inquiry #219.



## Secure Software For the Amiga

### AmigaHASP

A hardware-based system used to protect software from piracy and illegal use, AmigaHASP prevents unauthorized access and execution of the protected software. The protection key connects to the RS232 serial port of the Amiga and contains a unique electronic code, recognized by the protected software. During runtime, the protected program checks whether an AmigaHASP key with the appropriate code is connected to the computer's serial port. In addition, the keys contain 128 bytes of non-volatile read/write memory. This internal memory enables the developer to customize and program individual keys, for purposes such as user identification, multiple program/module authorization, software demoing, version control, and storing sensitive data. Aladdin Knowledge Systems Ltd, 15 Beit Oved St, Tel Aviv, Israel 61110, 972-3-5375795, FAX 972-3-5375796, Aladdin Software Security, Inc., The Empire State Building, 350 Fifth Ave Ste 7204, New York, NY 10118, (800) 223-4277, (212) 223-4277, FAX (212) 564-3377. Inquiry #220.

## Stats & Graphs

### Simple Stat Graph (SSG)

Douglas Stockman announced Simple Stat Graph (\$79.95). SSG is an entry level statistical and graphical data analysis program for the Amiga. The goal was to create a commercial quality program and to that end SSG relies heavily on the Amiga's Intuition interface, uses the CBM supplied Installer program for installation, includes on-line AmigaGuide help and has a high quality 200 page manual. The distribution set includes three floppy disks and a 3-ring bound manual. Technical support is very

limited due to the low cost. The interactive data manipulation capabilities are impressive while SSG's batch jobs ease repetitive data analysis tasks. Douglas Stockman, MD, 38 Tryon Park, Rochester, NY 14609, Inquiry #221

## Graphics in TRANSITION

### TRANSITION

TRANSITION is a low cost, powerful graphics conversion and processing program (\$59.95). Ideal for multiplatform conversion it handles IFF, GIF, PBM+, BMP, JPEG conversions etc. TRANSITION also does JPEG optimization and numerous color and color correction processes. TRANSITION has built in batch processing, no AREXX or additional modules are required. It is available now and will soon be part of the upcoming TRANSITION CD ROM disk geared toward AMIGA owners. Micro R&D, PO Box 130, 721 "O" Street, Loup City, NE 68853, (308) 745-1243, FAX (308) 745-1246, Inquiry #222

## 36-bit Toaster Painting

### Alpha Paint

InnoVision Technology announced Alpha Paint, the first professional 36-bit Paint and Image Enhancement application for the Video Toaster (\$699.95). It has a wide variety of 24-bit Painting, Masking and Image Enhancement tools, and a full 12-bit Alpha Channel for Anti-Aliasing, Blending and Compositing. Designed to achieve network caliber results Alpha also features one-of-a-kind Key Translucency and Soft-edge Feathering effects over live video. A fully integrated native Toaster application, Alpha Paint is designed as an all-in-one professional paint solution with

no additional programs, CHIP RAM or graphics hardware required. It is fully compatible with Video Toaster system 2.0,3.0, 3.1, and Toaster 4000. InnoVision Technology, 1933 Davis St Suite 238, San Leandro, CA 94577, (510) 638-8432, FAX (510) 638-6453, Inquiry #223.

## Physics in Motion Physics Laboratory in Mechanics

This multimedia physics program teaches kinematics, dynamics, statics, universal gravitation, work and energy, impulse and momentum, and rotational kinematics (\$59.95). An interactive laboratory notebook describes and allows the student to simulate 27 different experiments. The notebook gives instructions on how to perform the experiments by using everyday objects. Results are entered into the computerized notebook. An equation animation section teaches students the algebra used when rearranging equations. Also included are history, math, and unit reference sections. Opportunity with Learning (OWL), 460 Summer Ave, Reading, MA 01867-3819, (617) 944-1745, BBS (617) 942-7216, Inquiry #224

## CBM Lost Its Shirt, You Can Wear It!

### Commodore-Amiga Bankruptcy T-Shirt

This T-Shirt designed by former Commodore employees, signed on the back by members of the Amiga development team, and featuring a large "Eject" button on the front, commemorates the end of an era in personal computing. The T-Shirt is available for \$19 plus shipping, \$4 for US/Canada, \$8 international. Please state size(s) when ordering. Obvious Implementations Corp., PO Box 4487, Cary, NC 27519-4487, USA (800) 761-2042, or (919) 859-7407, Inquiry #225

## Make A Note! Sequel's Sequel

### Sequel v1.2

Version 1.2 of Diemer Development's Sequel™ music sequencing software for the Amiga is now shipping free to registered users (\$139.95 list). New in this version:

1. The user can transpose note playback up and down on the fly by semitones to accompany singers and musicians in all keys. Drum tracks, whose notes represent sounds, can be excluded from transposition.
2. Songs that are chained together from separate files can now be "unchained" into one long file, letting players overdub across the song's seams.
3. More user preferences are saved to disk. These include the Metronome sounds, both MIDI and AMIGA In, Out, and Thru Enables and the Color Palette.

Diemer Development has been an Amiga software developer and publisher specializing in MIDI since 1987, and has publicly stated that they will continue to upgrade Sequel in the wake of Commodore's demise. Diemer Development, 12814 Landale St Studio City, CA 91604-1351, (818) 762-0804, Inquiry #226

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# REVIEWS

## Brilliance 2.0

*R. Shamms Mortier*

There hasn't been so much excitement about a 2-D painting program since the days when the two giants battling it out for Amiga creative hearts consisted of the first edition of Deluxe Paint from Electronic Arts and the now obscured Aegis Images software from Aegis Development. There was really a sense at that time that though the battle was often bloody and hard fought, that the winner was bound to be the budding Amiga artist. After all, when competitive marketing works the way it should, the consumer benefits in the long run (at least that's what I was told in civics class almost a half-century ago). Well history is indeed tempted to repeat itself in the current digital war between Electronic Arts and its DPaint flagship and Digital Creations' Brilliance/True-Brilliance software. Electronic Arts has pulled back from Amiga development a lot since the birth of the Amiga, and it is hoped that the threat of facing Digital Creations' master painting software will shake loose continued development on Amiga wares (especially DPaint) from Electronic Arts. To the victor goes the spoils, and in this case, the "victor" will be the Amiga artist and animator if each developer motivates the other into new unexplored creative territories.

As most Amiga obsessives in the know realize, "Brilliance" is really two separate programs in one package, Brilliance and True-Brilliance. The lower end program of the two, "Brilliance", was written as a "register based" painting and animation program, and it supports from 2 to 256 colors on-screen (though for the enlarged palettes you should still run Brilliance on an Amiga 1200/4000 machine). "True-Brilliance", on the other hand, is AGA targeted for the A-1200 and A-4000 user only, and allows painting in HAM8.

screens are so much like true 24-bit screens, it's very hard to discern the difference (hence the name "True" Brilliance).

True-Brilliance was designed especially for the Amiga artist uninterested in working in HAM modes. True-Brilliance Amiga artists and animators, however, are treated to HAM6 or the newer HAM8 screens modes, allowing for close to 24-bit color imaging in the case of HAM8. Brilliance/True-Brilliance has a hardware key (dongle) protection scheme. Unfortunately, the prevalence of software piracy and the damage it does (no matter how innocent or irrelevant you might think it is) has made this a necessity with many developers.

### 2.0 versus 1.0

Most of the Brilliance/True-Brilliance software has been rewritten to address user feedback and to remove anomalies (yes... "bugs") from the 1.0 version, and also to enhance the speed at which the software works. Experienced users of Brilliance know that they have the capacity to create paintings on separate pages that are next to each other (like page 1 and 2). Now Brilliance artists can take advantage of the "RubThru" tool and its new alliance with the transparency setting. The topmost page can "show through" elements painted on the page underneath. In 1.0, it was only possible to do this at full strength, so that a background sometimes interfered with the foreground image, or detracted from it by coming in at full strength. With 2.0, it is now possible to do a Rub-Thru so that the second image is brought in with a user selectable transparency level. This effectively ghosts out the background image, and applies what 3-D animators call a "fog effect", so that the foreground imagery remains distinct. In addition, Brilliance 2.0 allows you to select any number of frames in its Animation Control Window to flip through ("page flips") as a "pencil test"

of an animation segment. Even though you might have hundreds of frames in an on-screen animation, you can input any number you'd like and flip through just that number from your present screen. This should allow for the further refinement of animated segments.

Both DPaint and Brilliance have a "Move Requester". A Move Requester allows you to animate brushes more or less automatically. If you have a number of screens (say 30) set as an animation sequence, a brush can be painted down anywhere on frame #1. Then the Move Requester is opened up, and numeric controls are applied to the brush to tell it how far to move and how to rotate. The DPaint Move Requester gives you control over the Brushes movement and rotation in all planes. The Brilliance Move Requester adds a graphic way of accomplishing the same feat, by allowing you to actually paint down the Brush manually at its start and end positions. As far as the variability of Move Requesters goes, Brilliance shines above DPaint in this area. In Brilliance 2.0 all of the settings used in the Brilliance Move Requester can now be saved out and applied later to any imported Brush. Among other useful settings in the Move Requester of both DPaint and Brilliance is "Trails" which allows you to add previously drawn images to the one being drawn presently, providing a visual "trail" that moves "behind" the animated image. Brilliance allows you to set the number of frames that will trail along behind the image, and is a useful setting for creating some unique animated effects.

### Brilliance Saving Format Choices

Brilliance offers a whole list of format alternatives when animations are saved to disk, among which are Op-5, Op-8 (Word), Op-8 (Long), and single frames. If you noticed that ANIM7 (Op-



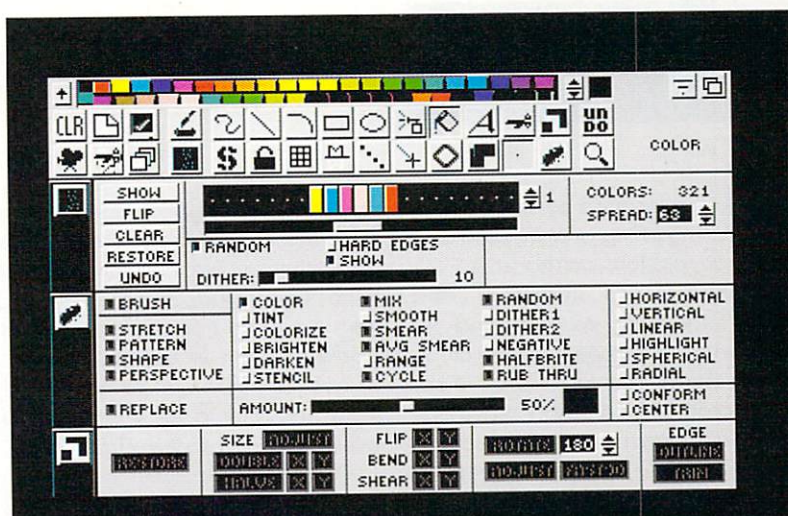
7) is missing, you are very observant. Op-7 is not a recognized standard by Commodore, and several non-standard editions of it exist but are not recommended for use.

There are other attributes that Brilliance owns that you may never have been invited to try, attributes not implemented in other painting software. Brilliance has a tool that allows you to set the colors used in a "Gradient Fill", for instance, by simply dragging the mouse in the Gradient Well area. You simply click on a color for each one needed, and place it at a distance from another color in a range of positions on a gradient bar, and by dragging the mouse with the left button held down paint all of the colors next to each other in the palette in a consecutive fashion. Brilliance's stenciling operations are more complex and full featured than those in most other paint programs, including the 24-bit ones. Among these is the Brilliance Lasso method. By using this option, you just circle an area that contains the colors you want to stencil-protect (or their opposites if you want to invoke the "inverse" function). The lassoed colors are automatically written to the stencil-protect buffer.

## Conclusions

The 2.0 version of this software is able to distinguish itself very nicely from being a DPaint clone. You will have to get used to its stackable menus to use it, which will probably be less of a problem for new Amiga artists than for experienced DPaint users. Once you see what it is able to do, however (especially if you are interested in developing HAM8 or 24-bit graphics) you'll find the learning curve well worth the effort. I am not one who wishes to see Brilliance blow DPaint out of the water, however. What I would like to see is Electronic Arts re-enter the fray, and for both EA and Digital Creations to wrestle for a good many years, so that the competitive process helps to give Amiga artists and animators what they deserve—the best 2-D paint and animation software in the universe.

**Brilliance / True-Brilliance**  
**MSRP: \$249.00 U.S.**  
**(\$49.00 U.S. upgrade cost for 1.0**  
**registered owners)**  
**Digital Creations**  
**160 Blue ravine Road, Suite B**  
**Folsom, CA USA 95630**  
**(916) 344-4825**  
**Inquiry #207**



Most of the Brilliance/True-Brilliance software has been rewritten to address user feedback, to remove anomalies, and also to enhance the speed.



# Cocoon Morph

R. Shamms Mortier

## Changlings, changlings everywhere, from forest floor to lofty air...

Anonymous

The Amiga is supported by some of the best image morphing and warping software that any platform can boast: ASDG's Morph-plus, GVP's ImageFX, and BlackBelt's morphing module (and we might even consider the somewhat crude morphing capabilities of DPaint). These high end programs contain a large number of other image manipulation features as well, so that their capacity for warping and morphing images is only part of the picture. Up until now, there has been no package that focused upon basic warping and morphing alone without the other enhancements. Enter Cocoon Morph (software created with the aid of the AMOS software design packages) distributed by DevWare.

Considering the quality of the competition, the first question we have to ask is why should we bother with yet another warp/morph program? In my estimation there may be two answers. The first is that it is dangerous thinking that anyone has the "field sewed up", because that hurts the consumer in the long run. There's nothing like the threat of competition to force the development of more advanced and unique tools in any package. The second answer has to do with pricing. Packages that enter any aspect of the marketplace with their competition already well established usually require pricing (hopefully accompanied by inter-

esting and new options as well) that is more alluring to their audience in order to establish their own marketing niche. At a price of only \$69.95, a discounted bargain from DevWare from the normal \$99.95, Cocoon Morph will definitely find an audience. So now we must investigate this software further to see what may make it worth even a paltry investment.

### The Cocoon Opens

The operation of the software is very simple, and will be especially quick learning for anyone who has had previous experience operating any other morphing software. Same size, source, and target images are loaded, and a grayscale of the images appears simultaneously on the left and right areas of the edit screen. Cocoon limits images to 24-bit, 6-bit HAM, 8-bit HAM, and 4-bit grayscale as far as output goes. Warping of an image is accomplished by loading the same image into the source and target areas. When you draw a poly around an element on the Source, the same poly appears on the target. Then it is a simple task to move the points of the poly on the target to positions you desire.

As for the animations, if you're working with nice hi-res files (24-bit is best) the gray scale interpolation which allows you to save them out as 16 level grayscales is excellent. Cocoon has this interpolator

built in to compensate for the fact that it does not address interpolation in a separate set of operators as does its competition. Cocoon is also very fast when it comes to creating frames for even the most complex moves, a boon to those needing to see results in the short run.

### Tools and Options

There are a few rules that Cocoon suggests you obey when forming the bounded areas that circle an area to be morphed or warped. The actual process of drawing the boundaries is simple, requiring mouse clicks to form the linear areas. Unfortunately, moving the associated points around on the target picture sometimes requires repeated clicks over the same point, since the mouse software sometimes seems to refuse to recognize a mouse click. There should be some way to adjust the area in which a click is responded to, a fine tuning slider for instance. A nice feature is the saving of "Set-Up" files, the point/line boundary areas. Cocoon is limited, by the way, to 400 points. Though the manual states that this is enough for "any warp or morph", I prefer to make that decision on my own, and would like to see a larger number for special applications. When moving the points in a Set-Up, it's usually best to work in magnify mode. Unlike its competition, Cocoon does not feature a variable zoom. Cocoon does offer a nice feature that allows the user to switch from a point in either picture to the same point in the other picture.

Cocoon does feature motion morphing, the ability to morph images from one animated sequence to another. To support this capacity, a simple tutorial and tutorial images are included. The manual states that the movement of background images is "unavoidable", and offers a solution that uses a color wash to tint backgrounds so that they are effectively taken out of the morphing/warping process. Background movement is not "unavoidable" in its competition. Morph-Plus for instance, from ASDG allows you special ways of protecting any area of a picture from being effected by warping or morphing.



Figure 1. Here is a sample of frames taken from pictures included with Cocoon which were formed into an animated morph.



Render modes include 4-bit grayscale, 6-bit HAM, 8-bit HAM, 24-bit, and a special "Test" mode that doesn't save any frames but allows you to see them in grayscale. The Test mode would be more useful if you could select to render frames of your choice instead of having to render every frame in a sequence. I also experienced more than a few crashes while trying to render in Test mode.

## Not yet a Butterfly

Cocoon Morph needs to be far more forgiving when it comes to the attempted loading of files it doesn't like, or when low memory threatens. Right now, it just removes itself from the screen returning you instantly to the WorkBench, even when an animation is 95% completed. While this may be preferable over crashing altogether, it would be better if an error flag popped up informing you concerning the reason for its indigestion, and then returned you to its editing screen. It should be able to load/save in JPEG (though Heiffner Communications' "Pegger" utility could be used in the interim). The poly tool that allows you to draw borders around selected areas needs to have a

circle/oval as well as a rectangular capacity.

A rather irritating problem with Cocoon is that it absolutely refuses to multitask unless you put it to sleep first. Amiga software that doesn't multitask in a standard fashion is rather like a reclusive person who refuses to admit that there are other people in the world, there is no possibility of inter-species communication. If it did multitask with its own screen still up I could have at least given you a screen shot of its interface. This should be fixed at the very earliest moment.

If I say that the Cocoon manual needs more tutorials and better (and more) graphics next to the text, that isn't to say it's worse than its competition in this area. I have yet to see a clear functional manual that comes with any of the morphing/warping packages on the Amiga market.

On a positive note is the speed at which Cocoon performs its tasks, and also the speed at which it accesses files (especially from a hard disk). Though nowhere near as full featured as its high end competitors, Cocoon has the distinct advantage when it comes to simplicity of use and a very friendly learning curve. Amiga users who are just beginning to investi-

gate image warping and morphing might select this as their starting package. Creating morphs is a very tedious and time consuming process, and demands the help of the best in Amiga graphics tools and processes, and software that is absolutely as crash-proof as possible. Cocoon contains some very intricate and useful tools (Form and Color Map value interpolation, Set-Up file saves, MemorySaver options, Transition Screen C-Splines and linear controllers, Background/Matte image integration, scaling...). With added attention to the needs of the professional user as well as addressing some of the standard morphing expectations (like the prevention of crashing the system when something is indigestible), Cocoon could find many more inroads as well as its own audience in the Amiga marketplace. When that time arrives, I will be glad to review it again.

•AC•

Cocoon  
MSRP: \$99.95  
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# FinalWriter 2.0

*reviewed by Merrill Callaway*

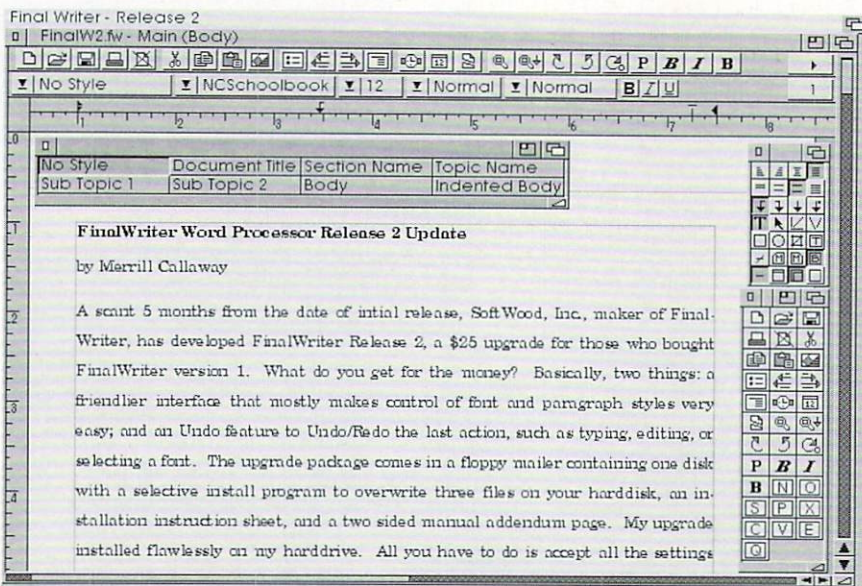
A scant 5 months from the date of initial release, SoftWood, Inc., maker of FinalWriter, has developed FinalWriter Release 2, a \$25 upgrade for those who bought FinalWriter Release 1. What do you get for the money? Basically, just two things: a friendlier interface that makes control of font and paragraph styles very easy; and a new feature to Undo/Redo the last action, such as typing, editing, or selecting a font. The upgrade package comes in a floppy mailer containing one disk with an install program to overwrite three files on your hard disk, an installation instruction sheet, and a two sided manual addendum page. My upgrade installed flawlessly on my hard drive. All you have to do is accept all the settings after you tell the install program where the old FinalWriter is. Here is a walk through the new features.

## Undo/Redo

Under the Edit menu is the new Undo/Redo item. It is a single buffer type of Undo/Redo that acts on everything back to the last action you did. Actions delimit the Undo/Redo buffer. A single action is comprised of things such as forward typing, pressing the back-space/delete key, edit commands

such as cut and paste, font selections, saving the document, and basically anything else you do from the menu that affects the content, look, or layout of the text. To help you determine what selecting this feature will actually do at any particular time, the menu item will state "Undo

typing", "Redo paste", "Undo style", and so on. If it can't do anything (e.g. just after a document is saved) it displays a ghosted "Can't Undo". The Undo feature is relatively safe because anything you can undo you can redo. Mostly, you will want to use it when you have deleted a line or paragraph and want it back. You would then select "Undo Cut" to get it back. SoftWood says Undo/Redo was the most requested new feature.



What do you get for the money? Basically, just two things: a friendlier interface for font and paragraph styles; and a new Undo/Redo for the last action, such as typing, editing, or selecting a font.

## ARexx Interface Remains Substandard

Unfortunately, they failed to give the Undo feature an ARexx command equivalent or to make any other improvements to the interface. The ARexx operations in FinalWriter remain substandard, as SoftWood neglects to use the RESULT variable as it should be used. For instance, there is no way to obtain essential information (the new port name) at the time a new document is opened. The new port name should be in the RESULT variable. OPEN suffers a similar shortcoming. This may sound minor, until you try to do anything except write a macro for the document you are in. The minute you try to go outside your document, you are in trouble unless you are willing to write a



number of custom functions that would have been unnecessary had SoftWood done ARexx properly.

## Font/Style Strip

There is a new alternative for the original paragraph "Tool Strip" called the "Font/Style Strip". It is a strip with five requesters for Style, Font, Font size, Normal/Super/Sub, Normal/Small Caps/All Caps, followed by three buttons to select all combinations of Bold, Italic and Underline (provided of course that the selected font has these styles available. These three buttons stay highlighted until you click them again. The Style selector is a quick access to the menu Layout/Apply Style item, the Font buttons provide quick access to various items under the Text menu. There is nothing new in substance, only a rearrangement for speedy and easy access. The original menu items are retained.

In order to access the buttons in the original Tool Strip, (if you elect to display the Font/Style Strip) there is a new feature to put up a small, floating "Tool Palette" which is a moveable window containing all the original Tool Buttons. You may also elect to display the user-definable Button Strip in a "Button Palette" as well as in the original button strip format. The Button Palette window is resizeable. If you select a window (in its title bar) you can move it around with the mouse or the arrow keys (With the arrow keys, holding down the control key moves them in one pixel increments; holding down the shift key moves them full screen; plain arrow keys move them in medium sized amounts). Floating Palettes are shared between documents. As each document window is activated, these Palettes change to reflect the settings in the document.

A "Style Palette" is also available. Oddly, it contains information from only one of the Font/Style Strip requesters, the one to select style. There is no font selection or font style capability from the Style Palette. You may, however use ARexx to configure buttons to perform font selection/style in the Button Strip and that button would appear in the Button Palette. That is what I did before the new release to get bold, and italic quickly. Palette windows may be closed with a close gadget, selecting the "Hide" option in the View menu, or by pressing the "Esc" key when the window is active.

## Menu Changes

The "View" menu is rearranged. View/Edit Mode/ now lets you select Body, Left Master or Right Master pages to edit. There are three new items: Show/Hide the three floating Palettes. There are items for choosing: which user button strip to display (or hide the strip); which paragraph strip (Tool or Font/Style) is active (or hide strip); which rulers, if any, are visible; and which page guides are visible. These can be set in Project/Preferences/Display menu as well (should you want them as defaults).

The Layout menu was rearranged so that Layout/Alignment/ may be set to left, right, center, or full justification. Layout/Spacing/ may be set to one, one and a half, two, or variable spaces between lines. Layout/Effects/ now contains Bullet, Hanging Indent, Indent Left, and Indent Right.

## Faster Graphics

SoftWood claims that the graphics in Release 2 are faster than before. I could not test that claim quantitatively. I did notice an intermittent, annoying phenomenon when I was backspacing rapidly from right to left. Sometimes, multiple ghosts of the text cursor would appear to its right as I held down the backspace key. They disappeared when I released the key. These ghosts apparently cause no harm but they lack elegance and they are distracting. As for my subjective impression of speed, on an A-3000 at 25 MHz, if I start typing in the middle of a paragraph and a screen of text must be displaced to receive my input, I can out-type FinalWriter Release 2's refresh rate (I'm not all that fast, either). If there is a lot of text to insert, I find I must hit return a few times to clear a space in order to see what I type exactly when I type it. Then I close up the space. Slow refresh seems to be a liability of all graphic word processors unless you own an A-4000. Another liability of FinalWriter is that a document longer than your system memory capacity cannot be loaded. WordPerfect, as imperfect as it is, can do this, and is still a better choice for long works such as a book.

## Minimum Requirements

After my supportive review of the original release of this product, I received several angry responses from readers who were not able to get the

same results as I did. After a review of the problem, most of these errors were caused by the consumer's system being less than the required minimum configuration.

SoftWood suggests that FinalWriter be used on any Amiga with Workbench 2.04 or later, a hard drive, and at least 2MB of RAM. A company spokesperson stated that FinalWriter will work on any graphics or postscript printer (no daisywheel). For the purposes of this review, I used an Amiga 3000 with 18MB of RAM and an Epson EPL 7500 with 6MB of RAM.

SoftWood offers free technical support to their users by phone Monday through Friday, 10 AM to 12 noon and 2 PM to 4 PM Mountain Standard Time. Technical support is not available by mail or fax. Customers outside of North America should contact their area dealer for support.

The suggested retail price of FinalWriter is \$199.95. Owners of FinalWriter Release 1 can upgrade to Release 2 for \$25.00 by contacting Softwood's sales line.

## Conclusions

Although the upgrade's interface refinements do improve speed and accessibility when it comes to font selection and style, these are just as conveniently done using ARexx macros. If you don't know or use ARexx, then you will undoubtedly put more value on these upgrade features than I do. Font access and style using only the original menu items was decidedly cumbersome, and it was good of SoftWood to fix that. The new interface is tricky. Notwithstanding the friendlier interface, the only addition of any real substance in the upgrade offer is an Undo feature and it's without ARexx command equivalent. If you find bolding and italicizing your text takes way too long, and you frequently need to undo what you just did, then you will want this upgrade even though it's rather sparse. I fear this is not your FinalUpgrade.

•AC•

**FinalWriter 2.0**  
**SoftWood, Inc.**  
**P.O.Box 50178**  
**Phoenix, AZ 85076**  
**Sales (800) 247-8330**  
**Tech Support (602) 431-9151**  
**FAX (602) 431-8361**  
**Inquiry #228**



# Recoloring WordPerfect

by Dave Senger

Do you still use WordPerfect, even though you have one of the new operating systems? So do I. If you need graphics, and a wide variety of fonts, sizes, and styles, there are better choices. But if you are a fast touch-typist, and you just want to enter and edit a lot of manuscript text in a hurry, WordPerfect is still the one to beat. WordPerfect programmers stopped working on the Amiga version a couple of years ago, and though the program still works well, even on the new operating systems, it is showing a few grey hairs. But after a little recoloring, it will look as good as ever.

The 'grey hairs' show up every time you save a document icon. The famous white scroll with lines of blue ink on it has been replaced with grey ink on black paper, which looks terrible. So I wrote a program to fix it. You can see 'before' and 'after' versions of the icon the program makes in the screen shot.

NewIconWP.rexx is listed at the end of this article. You can use this program to recolor the original WordPerfect document icon, or to replace it with any other legal icon image small enough to fit into the program's available space. You can copy to WordPerfect any of the icons you see in the screen shot. You can copy an icon you made yourself. You can even copy the first image of a dual-image icon, such as the Workbench Drawer icon. The hardest part of the job is typing in the listing.

When you have typed in NewIconWP.rexx, using a text editor such as Ed, save it to your Rexxc directory. This is an ARexx program, so when you use it, ARexx must be running on your system. If you haven't used ARexx yet, check your Commodore manual to see how to set it up. Both rexsyslib.library and rexsupport.library need to be in your Libs directory. If your Startup-Sequence doesn't start the ARexx interpreter for you, double-click on RexxMast in the System drawer.

rexsupport.library must be loaded before you run the program. If your Startup-Sequence doesn't do this for you, enter 'RXLIB rexsupport.library 0 -30 0' in a Shell.

CD a Shell to your WP directory, and make a backup copy of your WordPerfect program, which is called 'wp'. You can try to copy the first image of any legal icon to WordPerfect. If the image is too big, NewIconWP.rexx will refuse to copy it, and no harm will come to your program. Icons are stored in .info files, so enter, for example:

```
rx NewIconWP wp MyDir/MyFile.info
```

or just enter 'rx NewIconWP', and follow the prompts.

After the drive stops running, start WordPerfect, type a few characters, and save a dummy file. The icon you get should look exactly like the one you copied.

There are four versions of WordPerfect for the Amiga. They are: 4.1.9, 4.1.10, 4.1.11, and 4.1.12. If you have the second-oldest, 4.1.10, you will have to edit one line in NewIconWP.rexx to make it work. You will find instructions in the script. The script will work as is for the other three versions.

## Recoloring and Editing Your Icon

If you want to recolor the original WordPerfect icon, run an unedited copy of 'wp', and save an icon. Start IconEdit, in the Tools drawer, and drag your icon into the large editing window. Select Recolor from the Extras menu, or use <Right Amiga>-M to recolor the icon, then save it. Next, copy your recolored icon image back to 'wp'.

You may want to edit an icon, as I did to make the 'DAVE DOC' icon in the screen shot. Use WordPerfect to make an icon, then recolor it. Save your icon image as a brush by selecting 'Save IFF Brush' from the Images menu of IconEdit. Start a Deluxe Paint-style program, and select a two-bitplane, four color, 320x200 screen. Set the Palette to the new Workbench colors, which are:

	Red	Green	Blue
Color 0 (Grey)	10	10	10
Color 1 (Black)	0	0	0
Color 2 (White)	15	15	15
Color 3 (Blue)	6	8	11

Import your IFF brush, stamp it down in a few places, and edit your icon images until you get one you like. Cut it carefully as a brush, so that your edited image is no wider or taller than the original, and save it as an IFF image. Select 'Load IFF Brush' from the Images menu of IconEdit, to load your edited image. Select Backfill from the Highlight menu, then save your icon by selecting 'Save As' from the Project menu. Finally, copy your edited icon image to WordPerfect.

Similarly, you can also make and install a brand-new icon, using IconEdit alone, or with a paint program.

## For Techies

I am not going to explain the technical details of how NewIconWP.rexx works, since that would take up far more space than I have. Besides, I have done the job already. My article, 'Re Color', which was published in the recent Volume 3, Number 4 issue of AC's TECH, explains the design of .info files, which are the files containing the data that the system uses to draw icons. The article also presents RecolorIcons.rexx, an ARexx program you can use to recolor all those pre-OS 2 icons you have on your old disks. My follow-up article, 'Re Color Revisited', which will probably appear in AC's TECH, Volume 4, Number 3, presents



NewIconWP.rexx, along with several other ARExx scripts you can use to recolor or replace the icon images generated by WordPerfect and several other programs, plus some other ARExx scripts that will help you write scripts of your own to do the same job with most other programs which generate icons. In addition, there are several other pieces of software, along with a technical description of the editing process, plus an explanation of how to use all this material to make your own ARExx scripts to edit the icon images in programs. If you are not interested in programming, you can just use the scripts to replace the icon images in some of your programs.

That about covers it. Have fun.

## Listing

```

***** NewIconWP.rexx *****
/*
/*      Copyright 1993 by Dave Senger
/*
/*      Oct. 5/93
/*
/*      Please keep my name, this notice, and all comments,
/*      intact in any distribution of this program, in whole
/*      or in part.
/*
*****

***** U S A G E *****
/*
/*      Make sure you have at least one backup of your wp
/*      load file. CD a Shell to the directory containing
/*      wp, and enter the command, "rx NewIconWP", without
/*      the quotes. When prompted, enter 'wp', then enter
/*      complete pathname and file name of icon .info file
/*      you want to use. You should get a message saying
/*      that the job is done. Test patch by running
/*      WordPerfect and saving a dummy file. Attached icon
/*      should look like icon you used. There are only 416
/*      bytes of space for bitplanes in the wp load file, so
/*      only moderately-sized icons can be used. Script
/*      won't let you use an icon whose bitplanes are too
/*      big. You can check your icon beforehand by running
/*      it through PrintIconBitplanes.rexx, then printing the
/*      output file, 'FirstHexBitplanes', in RAM.
/*
*****

/*      Changes document icon generated by WordPerfect */
/*      4.1.12, 4.1.11, <4.1.10 ??>, or 4.1.9 wp load file, */
/*      by replacing two image bitplanes with two bitplanes */
/*      from an icon of your choice, and by editing width & */
/*      height words in Gadget and Image structures, to match */
/*      the equivalent values in the icon. */

/*      If you have 4.1.10, then you also have 4.1.9. If */
/*      last 800 or so bytes of both load files are */
/*      identical, this patch will work on 4.1.10. Edit */
/*      ELSE IF code line below as directed, then patch */
/*      your 4.1.10 load file. Better yet, write for your */
/*      free 4.1.12 upgrade to:
/*
/*      Macintosh Customer Support, G100
/*      WordPerfect Corporation
/*      1555 N. Technology Way
/*      OREM Utah 84057
/*
/*      Be sure to include your WordPerfect license number. */

```

```

PARSE ARG wpfile infofile
wpfile=STRIP(wpfile)      /* Strip spaces from each end */
infoline=STRIP(infoline)

DO WHILE wpfile=''
  SAY
  SAY "Enter pathname/file name of 'wp' load file,
  "file (<RETURN> to quit):"
  OPTIONS PROMPT " >>> "

```

```

PARSE PULL wpfile
wpfile=STRIP(wpfile)      /* Strip spaces from each end */
IF wpfile='' THEN EXIT 0
END

IF -OPEN('patchfile',wpfile) THEN DO /* Try to open wp */
  SAY "Can't find 'wp'. Sorry, no can do!"
  EXIT 20                      /* If no wp, quit */
END

x=STATEF(wpfile)          /* Get file attributes */
PARSE VAR x type size remainder /* Pick out file size, - */
IF size=116528 THEN        /* - and set offset - */
  offset=-510 /* wp 4.1.12 */ /* - to match version */

/* If size of wp 4.1.10 load file is known, replace */
/* next code line with edited line, substituting number */
/* of bytes in 4.1.10 wp for <size of wp 4.1.10>. */
/* ELSE IF size=114728 | size=<size of wp 4.1.10> | size=105396 THEN */

ELSE IF size=114728 | size=105396 THEN
  offset=-498 /* wp 4.1.11 <or 4.1.10> or 4.1.9 */
ELSE DO
  SAY "I don't recognize this file. Sorry!"
  x=CLOSE('patchfile')      /* If wrong size - */
  EXIT 0                    /* - close and quit */
END

DO WHILE infoline=''
  SAY
  SAY "Enter full pathname and file name of .info file whose"
  SAY "bitplanes you want to copy to wp load file,"
  SAY "file (<RETURN> to quit)."
  SAY
  OPTIONS PROMPT " >>> "
  PARSE PULL infoline
  infoline=STRIP(infoline) /* Strip spaces from each end */
  IF infoline='' THEN DO
    x=CLOSE('patchfile')
    EXIT 0
  END
END

IF UPPER(RIGHT(infoline,5))='.INFO' THEN DO
  SAY
  SAY "File name must have a .info suffix. Try again."
  x=CLOSE('patchfile')
  EXIT 20
END

IF -OPEN('infile',infoline) THEN DO /* Try to open specified file */
  SAY
  SAY "Can't find 'infile'. Sorry, no can do!"
  x=CLOSE('patchfile')
  EXIT 20
END

magic=READCH('infile',2) /* Start of DiskObject structure */
IF magic=X2C(E310) THEN DO /* If not icon .info file, quit */
  SAY
  SAY "'infile' is not a true icon .info file."
  x=CLOSE('patchfile')
  x=CLOSE('infile')
  EXIT 20
END

x=SEEK('infile',10) /* Gadget structure embedded - */
gg_width=C2D(READCH('infile',2))
gg_height=C2D(READCH('infile',2))
flags=READCH('infile',2) /* - in DiskObject structure */
GADGIMAGE=BITTST(flags,1) /* Dual-image icon?? */
GADGBACKFILL=BITTST(flags,0) /* Backfill or complement?? */

```

**Don't miss Dave Senger's companion article**  
**Re Color Revisited**  
 in Volume 4 Number 3 of  
**AC's TECH For The Commodore Amiga**  
**on sale now!**



# Accent on MultiMedia: Part IV

R. Shamms Mortier

In previous editions in this series, we have focused upon Amiga software that is classified as "MultiMedia". That means that the software is capable of generating and manipulating graphics and sound geared to the production and display of a variety of video based programs, either for broadcast, instruction, or live interaction (as exemplified by the kiosk displays at airports and other commercial sites).

There is another area of MultiMedia, however, that we should also touch upon in our attempt to cover the Amiga's involvement in MultiMedia—Amiga hardware products. There are many Amiga hardware products that act as parts of a total MultiMedia presentation: hard drives, fast SCSI controllers, linear editing packages, and more. There are very few hardware units that act alone in this realm. One of the most auspicious, especially if development on it continues, is the LightWorks Graphics Synthesizer from Euphonics.

## How I heard about this unit

Because I am heavily involved in performance arts as both an ensemble director and as a reporter on developments in the field, I was made aware some time ago that several performance ensembles on the West Coast were using Amiga enhanced video as a live part of their acts. These troupes were using various Amiga hardware to get their point across, but a couple of my friends advised me to investigate a new piece of hardware on the scene in use by more than a few groups. They told me it looked like a sound box, replete with sliders, but that its operation addressed on-screen Amiga video. Not having heard of any such unit previously, I decided to investigate further. What I found was a small company

```
WBDISK=1
WBDRAWER=2
WBGARBAGE=5
x=SEEK('infile',30)      /* DiskObject structure */
type=C2D(READCH('infile',1)) /* Does icon open window?? */
IF type=WBDISK | type=WBDRAWER | type=WBGARBAGE THEN window=1
ELSE window=0
x=SEEK('infile',17)      /* DrawerData structure exist?? */
do_DrawerData=C2D(READCH('infile',4))

/* If icon opens a window when double-clicked on, */
/* or even if it doesn't open a window, but */
/* contains a DrawerData structure, then SEEK */
/* past DrawerData structure and into Image structure. */
/* Else, just SEEK into Image structure. */

IF window | do_DrawerData=0 THEN x=SEEK('infile',68)
ELSE x=SEEK('infile',12) /* SEEK to 3rd word of 1st - */
CALL ReadImageStructure() /* - Image structure, then read */
IF bLength>208 THEN DO
  SAY
  SAY "Bitplanes are each "bLength" bytes long. Max. is 208 bytes."
  SAY "Sorry, no can do."
  x=CLOSE('patchfile')
  x=CLOSE('infile')
  EXIT 20
END
IF depth>1 THEN CALL Copy2()
ELSE DO
  SAY
  SAY "Only one bitplane. Sorry, no can do."
  x=CLOSE('patchfile')
  x=CLOSE('infile')
  EXIT 20
END

x=CLOSE('infile') /* Close input .info file */

x=SEEK('patchfile',offset-98,'end') /* Set file pointer */
x=WRITECH('patchfile',D2C(gg_width,2)) /* Gadget structure embedded - */
x=WRITECH('patchfile',D2C(gg_height,2)) /* - in DiskObject structure */

wpGFlags=READCH('patchfile',2) /* Read wp Gadget flags word */
IF GADGIMAGE THEN wpGFlags=BITSET(wpGFlags,0) /* Restore wp's default
comp. mode */
ELSE DO /* If icon being copied - */
  IF GADGBACKFILL THEN wpGFlags=BITSET(wpGFlags,0)
  ELSE wpGFlags=BITCLR(wpGFlags,0) /* - isn't dual-image, give wp - */
  END /* - same complement mode as icon */

x=SEEK('patchfile',-2) /* Set file pointer */
x=WRITECH('patchfile',wpGFlags) /* Replace edited flags word */

x=SEEK('patchfile',offset-28,'end') /* Set file pointer */
x=WRITECH('patchfile',D2C(width,2)) /* Image structure */
x=WRITECH('patchfile',D2C(height,2))

x=SEEK('patchfile',offset,'end') /* Set file pointer */
x=WRITECH('patchfile',a) /* Write bitplanes */
x=WRITECH('patchfile',b)

x=CLOSE('patchfile') /* Close patched wp file - */
SAY "That gets it. So long!" /* - and get out */
EXIT 0

ReadImageStructure:

width=C2D(READCH('infile',2)) /* 3rd word of Image structure */
height=C2D(READCH('infile',2))
depth=C2D(READCH('infile',2))
wordWidth=(width+15)%16
bLength=wordWidth*height*2
RETURN

Copy2:

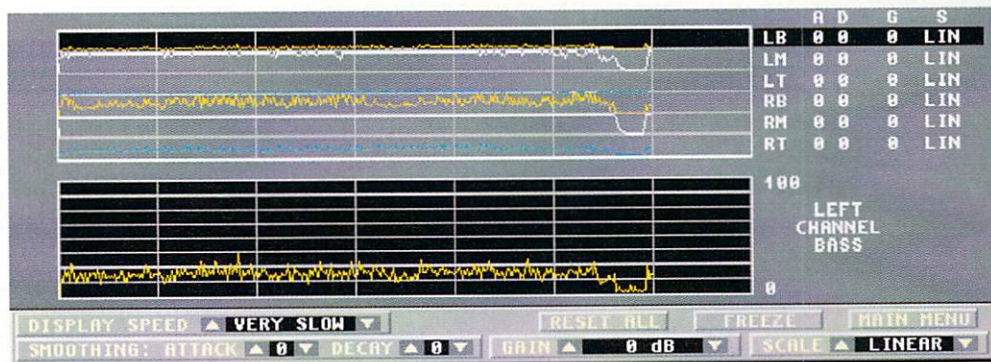
x=SEEK('infile',10) /* SEEK past end of Image structure */
a=READCH('infile',bLength) /* Read 2 bitplanes */
b=READCH('infile',bLength)
RETURN
```

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**Figure 1**  
The LightWorks Audio View Screen displays a constantly updated image of the sound entering the hardware's double RCA inputs, allowing you to tweak the audio in various ways.



in Sebastopol, California that was more than willing to ship me a unit for testing. This was the beginning of yet another Amiga obsession that would rob me of the few hours of sleep I still cling to.

### What LightWorks does and how it does it

The theory behind LightWorks is pretty easily described. This unit is capable of manipulating Amiga graphics screens according to several optional input triggers: by following a script that you create beforehand, by translating incoming sound and MIDI signals into visual information, by following the interactive movements of the LightWorks control sliders, or by allowing the Amiga keyboard, mouse, or joystick to initiate animated changes. A LightWorks program will probably contain various mixes of these alternatives or at least one option, according to the design and needs of the user.

### Scripting

This word always scares me, since whenever I make the attempt to use a software package that incorporates scripting, it usually means long hours of study and memorization following arcane and convoluted command structures in order to get even close to what I want. Not in LightWorks, and with very good reasons. First, the manual takes you very carefully through all of the scripting processes. Secondly, those processes themselves consist of easy to understand commands written more in English than in some scientific jargon. Thirdly, the script remains on the screen in front of you, and you can preview and change it interactively. The scripting, in fact, reminds me of the scripting process in one of my all-time favorite Amiga graphics programs (PageRender 3D) from a company (MindWare) no longer in business. This scripting must have had some thorough input from a long line of attentive Beta testers whose comments forced it to be as simple as possible. To make matters easier for later recall, a screen snapshot feature is included, allowing you to save the script screen in view for later study. The entire script can also be saved as a general

format to play the elements targeted or as a command structure you can plug other graphics into later.

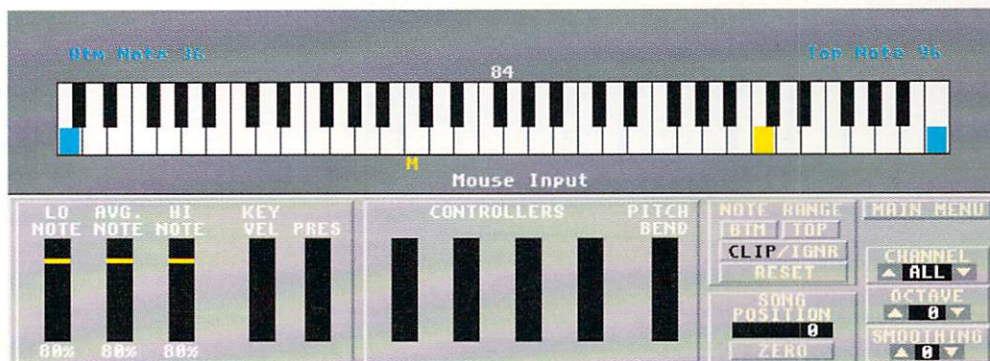
LightWorks scripting follows an intuitive reasoning: CAUSES and EFFECTS. A CAUSE might be the interactive manipulation of one of the eight LightWorks sliders, an audio trigger, or a MIDI event. An EFFECT in LightWorks is what happens to a targeted graphic and when it happens. Both the "what" and the "when" are tied to parameters set when scripting a performance. An EFFECT might be the appearance or disappearance of the graphic or its ability to color cycle, as well as the transposition of a new palette on an on-screen image.

### LightWorks FILERS

LightWorks recognizes three types of files that can be loaded and saved: Pictures (also includes IFF brushes), Palettes (two can be resident at a time), and Scripts. Pictures and Palettes are manipulated and triggered for action by the means already listed above. Palettes can be made to cycle, shift (rotated up or down in 25%, 50%, or 75%), and Blend, where two palettes combine to form a third. Pictures can reveal each other by wipe patterns, of which there are some 24 separate variations, or by any of 36 "stripe" pattern reveals.

Scripts are the third type of LightWork "Filers", and scripting is a necessary part of mastering LightWorks effects. Imbedded "timer" settings (start, stop, and resets) are integral to the scripting operation. Scripting is done by first choosing a desired "effect" and then by selecting something (a slider movement, Amiga keyboard equivalent, joystick movement, or sound/MIDI parameter) that will "cause" the effect to occur. A "Cause" can be set by a direct event or an event that has a "threshold" (like when a slider reaches a certain position, or when a note reaches a certain volume or frequency). Unlike other software that incorporates scripting, LightWorks scripting should take you no more than about an hour or two to learn, though complete mastery may take several days of practice.

**Figure 2**  
MIDI events can control the graphics on the Amiga thanks to built-in scripts and controllers in the LightWorks package. Here is the MIDI viewing screen where the control parameters are set.





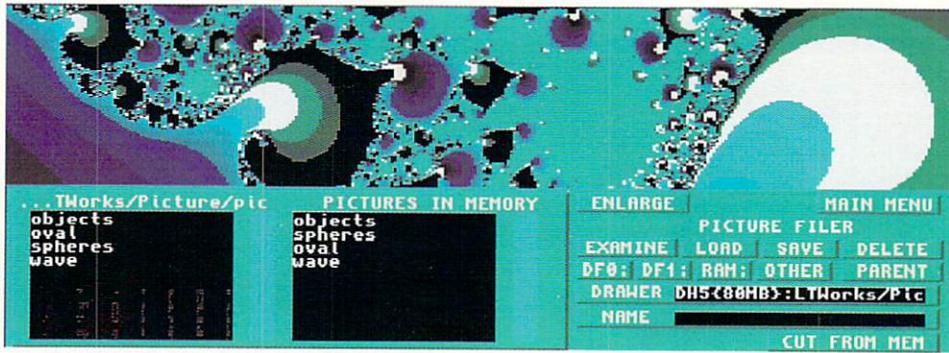


Figure 3  
The Picture directory displays imported graphics that will respond to the LightWorks controller sliders and other presets.

## Audio Triggers

On the back of the LightWorks G-100 controller box there are three connectors: a parallel port input that connects to the Amiga's parallel out, and two RCA ins that connect to the outs from a tape or CD player (I connected these to the outs from the Amiga itself, and was able to trigger events with One-Stop-Music-Shop scores composed in DMusic). The parallel port connection is necessary. The RCA jacks are necessary if you want scripts to be triggered by external music (you could just as well plug the out from a PA console into these stereo ins, and have the graphics triggered by an ensemble in live performance sounds). MIDI triggers can be configured as well, but you will need a MIDI interface connected to the computers Serial port as well as a MIDI keyboard. Audio and MIDI connections have their separate LightWorks screens where interactive trigger parameters can be set.

## Conclusions

The manual could use an index, but otherwise is very clear and takes you by the hand on a step-by-step learning tour of all of the options. One thing that I found out was that the LightWorks hardware takes control of various Amiga functions, and it doesn't get along at all with a LAN (Local Area Network) in operation (I use the ENLAN-DFS package from InterWorks and the ASDG Rover-net hardware). The conflict produces a blank LightWorks screen, so best not to use any LAN while the LightWorks system is in operation. The software addresses up to 16 color Hi-Res overscan images with no hitches, but there is no option for 256 color or other image formats. If you have 256 color pictures, it would be best to reconfigure them with ADPro or ImageFX into 16 color dithered

images before using them in LightWorks. The one thing that I think needs more immediate fixing is the non-standard LightWorks load/save menus. They don't allow for any drive names but the short list on board (DF0, DF1, and RAM). You can get to other drives by a circuitous route (choosing "Other"), but it would be better if the actual drives you have mounted came up as immediate choices. This shouldn't be too much of a hassle to fix. Obviously, I'd also like to see this system be more open to networking configurations. I would like to see LightWorks be able to import ANIMbrushes for use as well as static brushes, and the sooner it addresses 256 color displays the better.

I have a GVP GLock genlock hooked up to the system on which LightWorks is installed, and the resulting animated LightWorks images genlock perfectly over incoming video. This gives me a wealth of additional options for creating and recording new animation configurations for titling and other purposes. The main reason for purchasing this hardware/software package, however, is to use it in live MultiMedia performance situations. I would urge any Amiga based performance oriented organization or individual to give this unit a serious try. My personal intention is to do this in the autumn by designing some specific LightWorks screens to be used in conjunction with my performance ensemble ("Science Fixion") in concert situations, especially since my ensemble is very MIDI invested. Given the way it has tested out so far, I can't wait!

•AC•

The LightWorks Graphics Synthesizer  
MSLP: \$599.95  
(requires any Amiga with 2+ MB of RAM)  
Euphonics  
2685 Burnside Road  
Sebastopol, CA 95472  
(707) 823-1380  
Inquiry #229

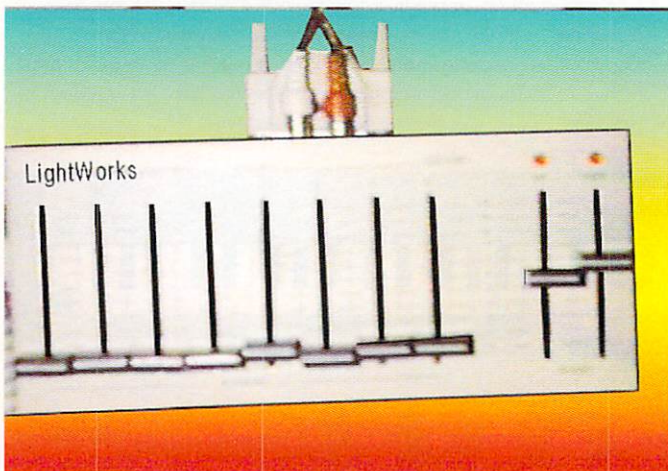


Figure 4 The LightWorks GS-100 control box.

Please Write to:  
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P.O. Box 2140  
Fall River, MA 02722-2140

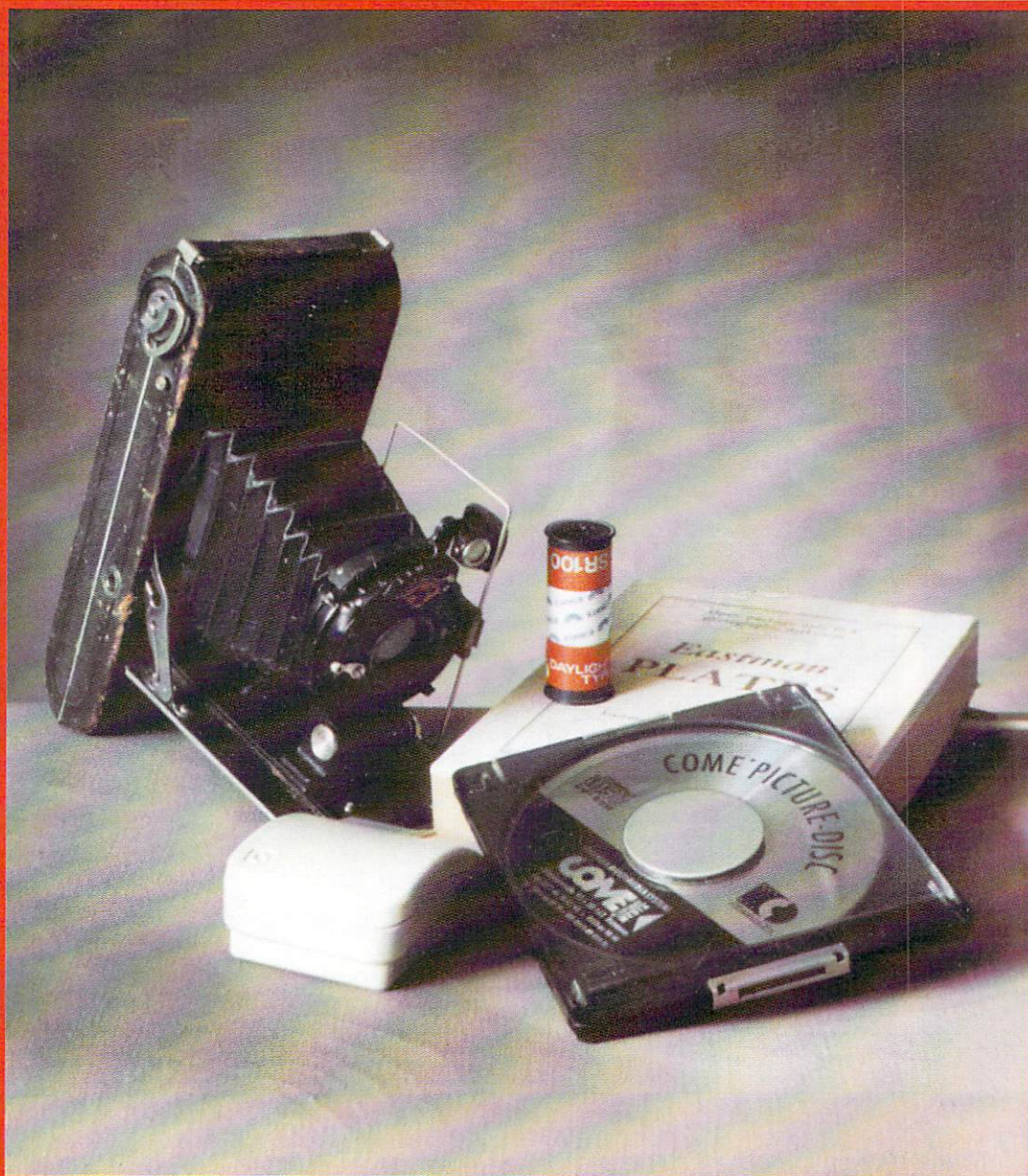


# A Survival Guide to CD-ROM

## Part II: Photo CD: The Amiga Enters the Age of Digital PhotographyDrive

by Mark Rickan

There is an old adage which maintains that a picture is worth a thousand words. If recent developments in the image processing industry are any indication however, it's time we changed that pronouncement to a picture is worth several megabytes. Since its introduction to the photographic and desktop publishing markets in 1992, the Kodak Photo CD format has significantly changed the means by which images are both manipulated



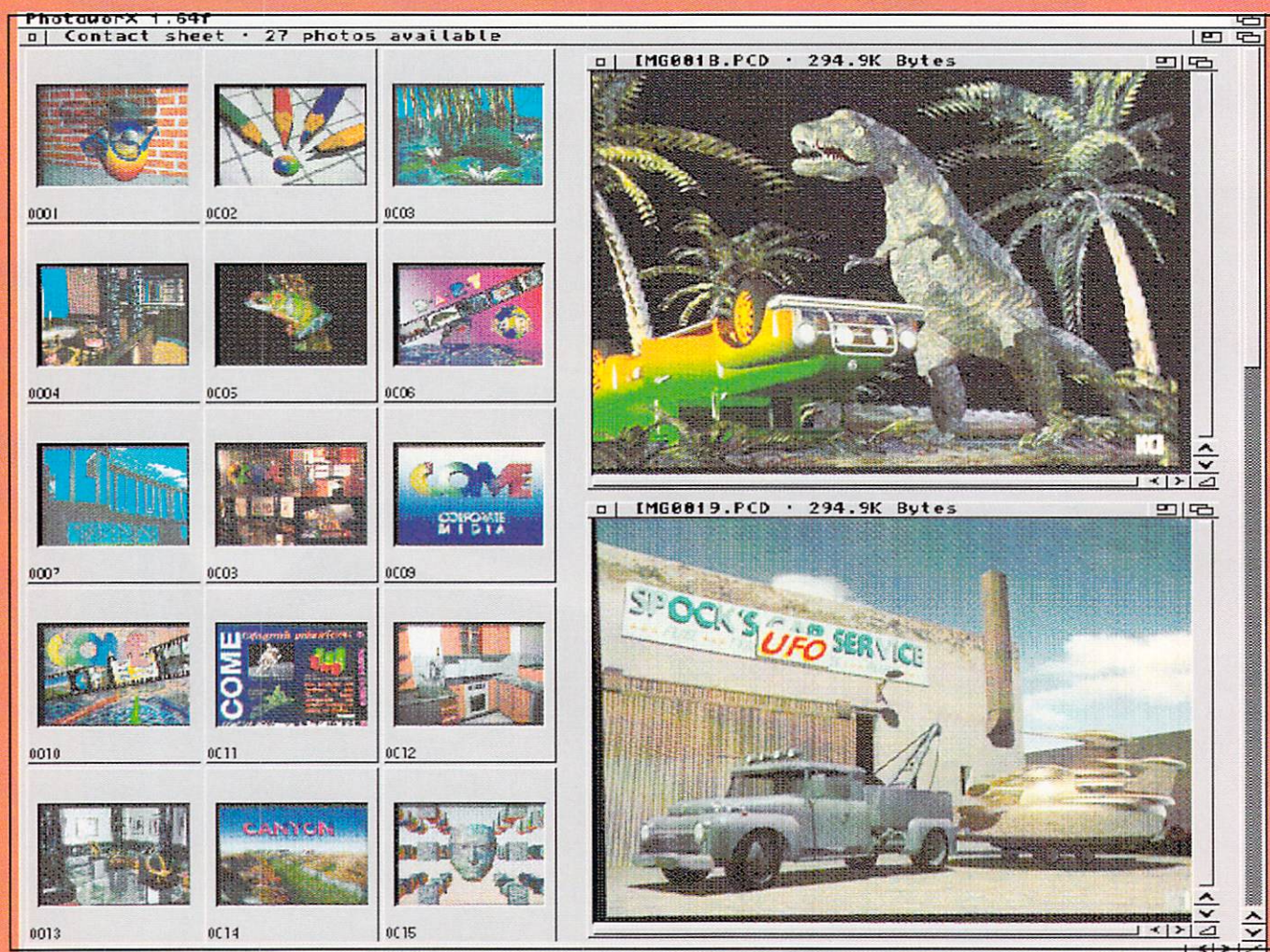


Despite the fact that Photo CD technology has only recently become available to microcomputer users, the potential applications of this development are enormous. Whether you foresee Photo CDs as becoming an integral part of your image processing needs, or you are simply inclined to use this format for entertainment purposes, Photo CDs offer an economical way of bringing digital photography to the desktop.

and stored. Whether you are involved in amateur or professional photography, electronic publishing or multimedia, Photo CD (or PCD) is destined to change the way you look at visual images.

A typical Photo CD is comprised of representations of 35 mm negatives or transparencies which are processed by transfer bureaus or photo-finishing labs. Each image is scanned using custom technology which digitally encodes the original picture as a series of 12-bit RGB (red, green, blue) values. PCD discs are then mastered on CD-recordable drives, resulting in the production of one of the special gold discs which have come to characterize the PCD format. While these discs are identical to the aluminum-based platters used in the manufacturing of audio compact discs and CD-ROMs, Kodak maintains that the reflective gold layer used with PCDs is both more durable and less susceptible to the effects of oxidation. When combined with a scratch-resistant outer coating, the company claims PCDs have an estimated life expectancy of about 100 years.

Images contained on PCDs are kept in five resolutions and are stored in an area known to as an Image Pac. Each Image Pac in turn appears as a file in the CD0:PHOTO\_CD\IMAGES disc directory listing. Individual Image Pacs maintain all the information needed to produce an image at any one of the five designated Photo CD resolutions. These specify the vertical and horizontal dimensions of



PhotoWorX has quickly garnered a reputation as the preeminent Amiga PhotoCD processing package.



the encoded image and are referred to as Base/16 (128x192), Base/4 (256x284), Base (512x768), 4-Base (1024x1536), and 16-Base (2048x3072). A special Pro Photo CD 64-Base format stored in the Image Pac Extension (IPE) is also offered, yielding a resolution of 4096x6144. The latter three image sizes address the needs of professionals, and use a lossless Huffman encoding system to compress their resulting file size. The need for this compression becomes quite apparent when you consider that an uncompressed 16-Base image typically weighs in at about 18MB. After the compression technique is applied, the resulting Image Pacs are reduced to anywhere between 1/3 to 1/6 of their original size.

### You Ought to be in Pictures

Because of the fact that Photo CDs are capable of storing roughly 100 images (or four 24- exposure rolls of film) in a range of display resolutions, the advantages of their use are readily apparent. For those involved in image archiving and analysis, the ability to save photographs to such a compact medium reduces the demand for storage space. Commercial prepress and electronic publishing services have also discovered that PCDs eliminate tedious image transfer procedures by allowing photographers to submit their work in a machine-readable format.

But one doesn't have to be involved in commercial imaging to discover the benefits of this technology. With nearly 60 billion

user reference guide and a Photo CD containing 25 sample images. I took the opportunity to test PhotoworX on an A3000 series machine equipped with 8MB of RAM and a Picasso II 24-bit graphics card.

Transferring the PhotoworX software onto your hard drive is an intuitive process which makes use of Commodore's standard Installer program. Once you have responded to all the configuration options, the program may be started by simply double-clicking on its icon. You then personalize your PhotoworX installation with the pertinent registration information, customize the program settings and you're ready to begin. Photo CD images may then be retrieved in one of two fashions. The first method involves selecting PCD files from a standard ASL requester, using a thumbnail preview to associate the nondescript "IMGxxxx.PCD" names with their corresponding images. Having loaded the picture, the program then allows you to render the image either to a window on the current screen, or to a specified custom screen. Options are available to set the size, number of colors, shading, and dithering method to be used to display the photo. These selections are restricted somewhat by the amount of free memory, but the program has provisions for full support of virtual memory solutions like GigaMem. This becomes a welcome addition when you consider the fact that a 16-Base 2048x3072 24-bit picture requires almost 19MB of contiguous memory for decoding.

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Because of the fact that Photo CDs are capable of storing roughly 100 images (or four 24- exposure rolls of film) in a range of display resolutions, the advantages of their use are readily apparent.

---

photographs taken in an average year, it's obvious that visual imagery is a preoccupation for virtually everyone. The main advantage of the PCD format is that it provides an option for permanently storing high-resolution digital images. You simply drop off your roll of film at a photo-finishing outlet and request that a Photo CD be produced containing the pictures found on your film. The charge for mastering a Photo CD will vary considerably, but you can expect to pay roughly \$1 per image. Keep in mind that the expense is not the only variable you need to take into consideration. Because of the fact that Photo CD technology is relatively new, be sure to consult with others in order to find a photo-finisher which has a reputation for quality film to PCD image transfers.

### The Paparazzi Amiga

Taking advantage of the Photo CD format is an opportunity which is available to virtually anyone with an XA-compatible multisection CD-ROM drive and appropriate software. Amiga users can relish in the fact that a wide variety of applications currently offer support for the PCD format. Available in both the commercial and public domain arenas, these programs offer capabilities ranging anywhere from sophisticated Photo CD manipulation to simple format conversion utilities.

### PhotoWorX

Distributed in North America by both Interworks and Spectronics, Corporate Media's PhotoworX (\$199) has quickly garnered a reputation as being the preeminent Amiga Photo CD processing package. Adopting a graphical interface popularized by Kodak's own PhotoEdge software, PhotoworX will operate on any Amiga equipped with revision 2.04 of the operating system and a minimum of 2MB of RAM. Video support is offered for the native Amiga HAM and HAM8 display modes, with additional drivers available for the Picasso II, Retina, EGS and DCTV graphics adaptors. Enclosed with the program disk is a well-documented

An alternative method for viewing and manipulating Photo CD images under PhotoworX is through the contact sheet. Just like a series of proofs developed by a photographer, these slides serve to represent the pictures found on the CD. The dimensions, number of colors, shading technique, and number of columns used to display these slides are all configurable and may be set as desired. Double-clicking on any one of the preview images loads up the corresponding picture and renders it according to the designated display mode parameters. By using the 'view' menu option, it becomes possible to examine the picture in full-screen mode and take advantage of several of the most popular 24-bit graphics cards.

Apart from the extensive image viewing options at your disposal, PhotoworX offers a bevy of processing features for transforming PCD pictures. Images may not only be printed and exported to a variety of IFF formats, but also flipped along their X and Y axes, rotated in 90 degree increments, and color-adjusted according to their brightness, contrast, gamma and RGB attributes. Additional options are offered for smoothening and sharpening the image, as well as producing a negative. It is also possible to define an area of the picture to enlarge, reduce or cut a portion of the image. These functions will undoubtedly prove to be particularly valuable to many users, and set PhotoworX apart from its competition. Regrettably, the current release does not make provisions for ARexx support, an option which is becoming increasingly essential for image processing and manipulation.

### AsimPhoto

Like PhotoworX, the AsimPhoto utility bundled as part of Asimware's AsimCDFS package (\$89) allows you to convert PCD images by selecting them from a file listing or through a pictorial directory containing grey-scale miniatures of the pictures. Requiring revision 2.04 of the operating system or greater and a minimum of 512k of available memory, AsimPhoto provides a simple approach to converting PCD pictures. Following installation of the



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suite of applications included with the CD-ROM file system, you simply double click on the AsimPhoto icon and you are ready to explore the world of Photo CDs. For those users equipped with a Picasso II or EGS graphics adaptor, it is possible to view pictures as full-screen 24-bit images.

While AsimPhoto is decidedly more spartan when compared to PhotoworX, it does offer an ARExx port for converting PCD images to their 24-bit IFF equivalents. This feature is especially helpful for situations in which you wish to perform batch conversions through programs like ADPro, Image FX or Imagemaster. At the present time, the greatest liability with AsimPhoto is the fact that it does not offer support for the 4Base and 16-Base PCD formats. This will prove to be of little concern for most users, but is a need which should definitely be addressed in future revisions. Video display mode support for the HAM and HAM8 modes is also sorely needed.

In order to address a number of these concerns, Asimware has indicated that it will be releasing a more robust Photo CD solution which will be marketed under the name Photo CD Manager. The preliminary version that I received at the time of this writing was designed specifically to cater to the needs of CD<sup>32</sup>, A1200 and A4000 users. Photo CD Manager (\$59) not only adds support for displaying pictorial directories in color, but allows for images to be rendered to the 262,144 color HAM8 modes available under AGA series platforms. Additional features allow you to compose slide show presentations of Photo CD images, using a variety of wipes, fades and transitions. This should prove to be good news for those interested in conducting multimedia presentations.

### Public Domain Solutions

While PhotoworX and AsimPhoto offer Photo CD-specific applications which will accommodate the needs of most users, those with more modest demands may want to take a look at some

freely distributable alternatives. All of these programs are widely available on local BBS systems and the Aminet FTP archives. HPCDtoPPM by Ingo Wilken is an Amiga version of the original UNIX program by Hadmut Danisch. This utility is designed to convert Photo CD images to Postscript and Portable Pixmap (PPM) file formats. A number of variables are offered for modifying the attributes of the resulting images, including dithering and scaling. Quite powerful, but definitely not for the uninitiated.

Originally released as part of XETEC's CDX CD-ROM file system, PCDtoIFF is a simple command line utility which allows one to convert Photo CD images to their 24-bit IFF equivalents. The resulting files may then be displayed using packages such as Image FX, ADPro or Viewtek by Thomas Krehbiel. Options are available to specify the desired PCD resolutions, file names and depths of the resulting IFF images. PCDtoIFF is a derivative of the HPCDtoPPM program, but will prove to be straightforward for those comfortable working within the CLI environment.

PCDIFX by Gunnar Niclas offers a PCD extension to users of Image FX. You simply copy the program into the modules/loaders area of the installation, and you now have the capability of reading images in the PCD file format. Accredited to 'BAZZ', OpalPCD is a similar program available for users of the Opalvision card from Centaur.

### The Final Analysis

Despite the fact that Photo CD technology has only recently become available to microcomputer users, the potential applications of this development are enormous. Whether you foresee Photo CDs as becoming an integral part of your image processing needs, or you are simply inclined to use this format for entertainment purposes, Photo CDs offer an economical way of bringing digital photography to the desktop. For those looking for a professional-quality Photo CD processing package, look no further than PhotoworX. It is not only extremely versatile and easy to use, but also offers a wide range of image manipulation functions. With the addition of ARExx support, it will become an essential tool for anyone interested in using Photo CDs in their productions and publications. AsimPhoto on the other hand, offers a cost-effective solution which is merely one component in the series of CD-ROM utilities bundled with AsimCDFs. Also watch for Photo CD Manager, an inexpensive AGA-specific presentation program which promises to be just what you'll need for showing off your latest product or the snapshots from your recent vacation.

•AC•

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Inquiry #204





# bug bytes

by John Steiner

tips  
hints  
workarounds  
suggestions  
updates  
fixes

## Amiga Modem Connection Problem

Greg Suire sent EMail describing a problem in connecting a Zoom 14.4 KB Fax/Modem to his Amiga 1000. He is using the same cable that previously worked just fine with his 1200 baud modem. When he turns on the CPU, the MR light on the modem begins to blink. He wonders if pin 21 on the Amiga side might have some incompatibility with the modem. RTS/CTS was set in preferences and in software, and the proper initialization string is being sent. Any suggestions from those who have run into a similar problem? Drop a line, and we'll pass them along.

## RAMworks and Workbench 2.0 Revisited

Brett McDonald sent CompuServe EMail regarding Clete Baker's question from the April 1994 Bug Bytes. He writes, *I am successfully running the Applied Engineering RAMworks 2000 RAM Card under Kickstart/Workbench 2.1 (and formerly 2.0). I have had experience with the problem that Clete Baker of Omaha, NE is describing.*

The problem isn't exactly a conflict between the RAMworks card and Kickstart/Workbench 2.1. More precisely, it seems the problem is flaky DRAM chips on the RAMworks that the auto-memory configuration of Workbench 2.0+ has problems with. The card and Kickstart, in trying to autoconfigure, start to get conflicting indications of how much memory is on the Card - the Memory Configuration LED's start to flash in alternating sequences - and the system attempts to restart after failing part of its POST routine. The solution is to move the memory chips around on the card (or remove a bank and shift the rest), re-seating them. Also check and see if there are mixed speeds of DRAM (i.e., some 80 ns, some 70 ns, etc.) installed. If so, they must be installed with the slowest speed chips installed first at the front end of the card. Any 100 ns or 120 ns DRAM chips in the card may have worked fine under Workbench 1.3, but Workbench 2.1 seems to have problems with them. I tried re-installing the 2 MB of 100 ns chips that I removed previously, and now the card works fine when I have 80 ns and 70 ns DRAM installed (256Kx4's), but if I install the 100 ns chips, very shortly after boot-up the system crashes (if it boots at all) and the RAM Card's LEDs start flashing.

*The 100 ns DRAM is the memory that my card came configured with from Applied Engineering, so if Clete bought the card fully loaded (8 MB) and they are all 100 ns chips, it could be an expensive proposition getting the card working again. But then again, its one of the few cards that you can expand in 512K chunks (last week I was running mine with*

*1.5 MB on the card with no problem, but now back up to 3 MB installed on the card (yep, not 2 MB, not 4 MB, but honest to goodness 3 MB, autoconfigured!).*

## Kickstart 2.05 ROMs and Early A500s

Brett McDonald also sent along a note that might be of value to readers with older A500s who are considering upgrading to Kickstart 2.05. Brett writes,

*Kickstart 2.05 ROM's often don't work in older Amiga Machines. There was a technical note from Commodore which indicates that Kickstart 2.05 ROM's are incompatible with early model A500s (particularly revision 5 and earlier motherboards). Hence people have to watch just which Kickstart ROM they are getting. The 2.04 ROM is still available (I know, having just received a 2.04 ROM and a 2.1 upgrade kit a month ago after Commodore Canada had been out of stock for the previous 6 months, and yet getting a 2.05 ROM out of a 2.0 upgrade kit that another supplier just happened to have in stock). I ended up with a used A500, revision 5, and I COULD NOT keep it running consistently with the 2.05 ROM, yet it runs fine under 1.3, and that 2.05 ROM worked great in my A2000.*

Brett also writes regarding another 2.05 ROM experience. *I was setting up for a null modem link on my A3000-25/100 with a Hewlett-Packard 9000/360 workstation (I have successfully accomplished null modem hookups many times before with many different machines). When I plugged the null modem cable into the A3000, I heard a pop and later found out that my entire system was fried (except for the hard disk and the high density floppy). The repair man said that one of the pins carrying power must have shorted with something. I am a little skeptical about the diagnosis because I would have really had to have been off to make that happen (I wasn't).*

You wouldn't be the first one this happened to, however, the problem may not be as severe as you describe. The A3000 has a fuse connected to one of the pins on the serial port. (It's very small and soldered in, so don't expect to find it or replace it easily. They meant the fuse to protect the motherboard should the metal ground shield on an expansion cable come in contact with the power pin on the Amiga serial port.) The cost of replacement isn't inexpensive, either, which underscores the fact that one should always shut off the Amiga before plugging anything into its expansion ports.

Mr. Johnson continued, *That incident left me with the only other Amiga in the house (A2000, 1 MB of RAM, 2 floppies). I was able to get a 2091 SCSI card for my hard disk, but could not use it until I upgraded the 1.2 Kickstart to 2.05.*

*The 2.05 ROM allowed the 2091 to autoboot my hard disk. Right now the 2.04 OS from the dead A3000 is running on it.*

The guru problems began after the insertion of the 2.05 ROM. They are random and hard to predict. At first I thought it had to do with my 1 MB of RAM (the OS would take up all but 380k), but I knew there was enough RAM for the requested task when the computer would bomb out. Here is a list of all the gurus I have kept track of:

Word Perfect 4.1.9: 8000 0004 Task: 00C0670A  
Disk Master 2.0: 8000 0025 Task: 00C6B090  
Quarterback 4.3: 8000 0003 Task: 00C0BA38  
Quarterback 4.3: 8000 0003 Task: 00C0D1F4  
Amiga Monitor (PD): 8000 0003 Task: 00C62AF8  
Disk Master 2.0: 8000 0004 Task: 00C0670A  
JR Comm 1.02a: 8000 0008 Task: 00C0670A

I added 2 MB of fast RAM to the 2091 card. After that I told Quarterback Tools 1.52 to do a routine scan my Work: partition (80 MB). After a few minutes it came up with a new guru:

Quarterback Tools 1.52: 8000 000B Task: 0020B750

Another unrelated one happened not too long after:

Rebooting: 8000 0003 Task: 00206422 I have no idea why, but it seems like a lot of numbers/variables/listings tend to lock my Amiga.



*I hope this information will help you track down this major annoyance. If you find out any answers, please let me know.*

Any comments or suggestions?

### Recolor Fixes Icon Problems

Maxx Daymon sends EMail with a response to Jim Shaffer's Icon question in the March 1994 Bug Bytes. He writes,

*The reason Mr. Shaffer is having problems is because some of those older icons actually HAVE data in the higher bitplanes (thus, a "FixIcon" program won't fix it - It doesn't see anything wrong!) Some of the older icon editors apparently wrote garbage to these areas which the computer (able to open higher bitplane Workbench screens) thinks is part of the icon image.*

What he needs is "Recolor" from Fred Fish disk #490. Recolor was intended to swap the colors of icons to/from 1.3 & 2.0. The Recolor ALSO truncates bitplanes.

Get Recolor. Click on the icon and select "Information...". Now, click on "New" and type in "TRUNCATE=2" (will truncate all but the first two bitplanes). Make sure you don't use this on 8 or 16 color icons!

### Workbench 2.1 Gurus & More

Maxx Daymon also wrote with several comments regarding various items listed in the April 1994 Bug Bytes.

*There are a few possibilities regarding Mr. Myers Software Failures. Since he has had the crash on bootup - 2.1 probably isn't the culprit, not directly anyway. 2.04/2.05 are the only possible ROMs in this situation, since 2.1 is a disk based update and has no ROM counterpart. There are a few things that might be happening:*

*There could be a virus (as yet undetected by virus checkers) that causes a software failure, rather than triggering because of OS differences. (This would explain the failure on boot-up)*

*The 2.x versions of Kickstart access some of the chips on the motherboard differently, and faults will show up under 2.x more readily than under 1.3. The read/write errors could be due to a faulty CIA - 2.x accesses the CIA chips differently, and by default speeds up the step rate of drives. Older drives cannot handle this increased step rate and fail.*

The errors:

8000 0003 (Address Error: Word access on odd byte boundary)

8000 0004 (CPU Error: Illegal instruction)

The 2.1 Setpatch also has the drive fix (Patch for 1010 drives) You can type "Setpatch" at any time to get a list of installed patches. A3000 users might try replacing U202 on the motherboard. The 2.0 setpatch should not be used in an OS 2.1 environment.

*It may be software (like a commodity) that is running in the background that is causing these problems. Also, the errors are somewhat general and can be caused by different things. 2.x uses a different numbering system for errors which leads to some confusion.*

### Vertical Pin Striping Problem on A4000/030

*The problem comes from crosstalk between two of the traces leading to the video connector. It generally only shows up in 31 kHz modes. Open up your silver monitor adapter (DB-23 to DBH-15) and solder a 100-ohm resistor between pin 15 (of the 23-pin connector) and ground. This should eliminate the banding.*

### Temperature problems with A500

*Many of the chips in the A500 are socketed. Certain temperatures can cause these sockets to lose or have bad contacts with the chips - while warmer temperatures can cause the sockets to be more forgiving. Re-seating his chips, or replacing the sockets with a higher quality style might*

*fix his problems for good. Condensation is also a concern in some geographic areas.*

Our local Amiga service center technician also commented that it's quite common with the A500 to develop problems that are fixed by simply taking the cover off, and pressing down firmly on all socketed chips.

### Toolmanager 2.0 and Quarterback

*PROGDIR: is a temporary assignment made by AmigaDOS when you double click on a program icon. PROGDIR: is the path where the program was launched. In my experience working with Quarterback, you must insert a high density disk BEFORE Quarterback locks the drive. Quarterback locks the drive in whatever mode it happens to be in (determined by the disk currently in the drive, in most cases) and does not accept another density until the drive is unlocked. Mr. Hyatt should make sure he is using the WorkbenchStarter with Toolmanager to insure that Quarterback's PROGDIR: is correctly assigned.*

Thanks to Maxx for all of his comments.

### GVP's I/O Extender Fix

Corwin Wong of Toronto, Ontario sent an EMail letter regarding Barlow Soper's GVP I/O Extender switch question mentioned in the March 1994 Bug Bytes.

*He writes, Users who have GVP's I/O Extender no longer have to cry about not being able to use GVP's card for their printer. I would also like to say that the user is now able to use their printer and ParNet at the same time. Something that everyone has been looking forward to, especially us GVP I/O Extender owners.*

*How I accomplished this was with the use of a program called ParPrefsV1.0 off a local BBS. The author is Benoit Mortier. What this program does is allow the user to output their printouts to any device, other than the Amiga's internal parallel or serial port.*

*The main feature that I like ParPrefs is due to the fact that GVP's redirector program does not work properly. With ParPrefs I'm also able to use ParNet at the same time my printer is spilling out my homework. ParPrefs requires you to have at least one MB of RAM and Workbench2.x to run.*

### Quarterback 6.0.1 Supports Supra Turbo 28

Terry M. (No last name provided) sent EMail regarding the release of a minor upgrade to Quarterback that fixed a compatibility problem with Quarterback 6.0 and the Supra Turbo 28 accelerator. He writes, *I have an A2000 which I recently upgraded with a Supra Turbo 28. When Quarterback 6.0 came out, I immediately upgraded because of the promised faster compression times. To my dismay, the use of the compression feature sent me to the GURU! I wrote to Central Coast Software detailing my problem and system configuration. I received a disk with Quarterback 6.0.1. The shipping notice stated it was to correct problems, like mine, with the Supra Turbo and compression. To my delight, it does work and compression is much faster than 5.0.*

### Vortex GG486SLC and CrossDOS

Doug N. sent EMail with a question for Bug Bytes readers. He writes, *I use the Vortex GG486SLC. I have an MS-DOS partition set up for the board. I would like to directly read this partition from the Amiga side using CrossDOS. I have posed this question to both Vortex and Consultron. I got suggestions, but never a working answer. Has anyone been able to accomplish this? There is a Mountlist-like file used by the GG, but if I mount a CrossDOS partition using its information, CrossDOS still cannot correctly read the partition. Before owning the GG, I used the software PC emulator CrossPC. I was able to read an MS-DOS formatted partition with no problem. Incidentally, I'm using version 5.06 of CrossDOS.*

How about it readers, any suggestions?

(continued on page 37)



# DIGITAL IMAGE SPECIAL FX

## PART IX: Displaced Textures

by William Frawley

From OilPaint and Fresco, to Tempered Glass and Plaster effects, this time we'll rely heavily on a couple of common image processing operators such as "Displace\_Pixel" and "Median\_Filter" for some eclectic 2D texturing.

### New Beginnings

As I stated at the close of last month's column, this was going to be the last part of my ongoing 2-D special effects series — that was before the long-awaited new upgrade to ADPro suddenly came into my possession! With ADPro 2.5 now sporting a new interface, operators, display options, several new ARexx macros and more, reacquainting oneself with this old friend amidst the current competition is sheer delight now.

While still lacking a complete set of regionalized painting options, compared to OpalPaint, ImageFX and ImageMaster, I find ADPro to be the fastest and most efficient at performing most of the main global image processing functions necessary for day-to-day video and still image work. Kudos to ASDG, for what they do, they do extremely well. Although all of the following effects can be accomplished in one form or another in any of the other image processing applications, I think it important that this month we devote our entire attention to ASDG's phoenix.

### A Brief Look At Some New ADPro 2.5 Features

I'm sure that I'm going to neglect a few new features, but the first and foremost obvious difference is the improved graphical user interface. No longer consigned to opening its own, low resolution non-interlaced screen, ADPro can now open on any public or Workbench screen, in any resolution and with whatever font you have set for that screen (Figure 1).

Also included are several new operators such as Antique, Collapse, Displace\_Pixel, Intensity\_Range, KillTemp, Mosaic,

Pattern, Polar Mosaic, Rotate, SimPrint and Twirl. As you may have guessed, KillTemp implies a new temporary or second buffer to store another image, which also serves as an Undo buffer if needed. If that weren't enough, you can now display for easy access, just like the Loaders, Savers and Operators, any macros written by yourself or a third party in a new User Commands window.

Finally, several new macros, or pseudo-operators as they are called when placed in the Operators2 subdirectory, are included to facilitate operations ranging from Embossing to Mirroring to Solarizing. Two of these pseudo-operators, OilPaint and Fresco, and the ones we will be creating, rely heavily on the new Displace\_Pixel operator and a veteran, no doubt less often-used operator called Median\_Filter. Let me explain how these two work.

### The Displace\_Pixel and Median\_Filter Operators

Pretty much self-explanatory, the Displace\_Pixel operator in ADPro 2.5 simply scatters pixels a user-defined distance of Radius with a chosen Probability, or likelihood of being displaced, and in a random direction determined by a Seed value. In other words, a large Radius value results in a very diffuse image, even unrecognizable if this value is high enough. A probability of 100 guarantees that every pixel will be displaced, or if 50 is chosen, half of the pixels in the image will be moved. Finally, if the Seed value is left constant for successive invocations, the direction of movement will remain the same throughout the process. A different Seed value in each frame of an animation, for example, will produce random variations of direction for some possibly "dramatic dissolves."

This operator also exists in both ImageFX and OpalPaint where it is known as "Disperse" and "Diffuse," respectively. Therefore, similar results can be achieved in all these applications. The same goes for the Median\_Filter, as it is known in ADPro.

This operator examines each pixel and eight of its immediate neighboring pixels and computes a median color value for them. If the pixel in question differs from this value by more than a certain amount, the Threshold, it is replaced with this computed median color value. Ultimately, this has the effect of reducing color noise and various other artifacts.

Incidentally, in OpalPaint the "Median" draw mode averages the brightness values of a user-definable grid of adjacent pixels; similar to Median\_Filter in ADPro, but not exactly the same results. Unless I overlooked it, I couldn't even find a related function in ImageFX, although it seems that the "Oil Transfer" effect must use some form of this operator in its algorithm to achieve the stated effect. I'm just waiting for that "You dumb @\$!" response alerting me of my ignorance. Very briefly then, let's look at how these two operators are used in the ADPro's new OilPaint and Fresco macros.

### The New OilPaint and Fresco Pseudo-Operators

As you can see by examining the ASCII text file "\_OilPaint" located in the Operators2 subdirectory, an oil paint effect is achieved in a simple three-iteration loop. The first time through, all pixels are moved in a one-pixel radius from their starting positions

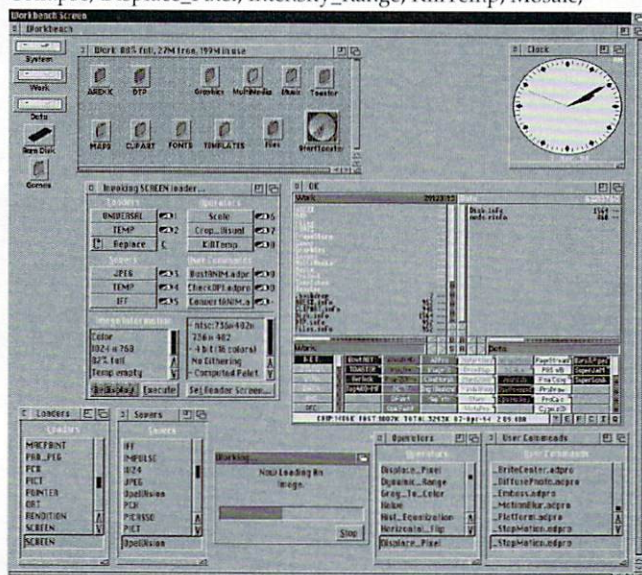


Figure 1: A look at ADPro 2.5's new user interface. Here it is opened in "Button Interface" mode on a 1024x768 Workbench screen with all the Loader, Saver, Operator and User Command windows opened for quick accessibility.





**Figure 2: "Brad Berry—Renaissance Man!"** A comparison showing the difference between the "OilPaint" and "Fresco" pseudo-operators available in ADPro 2.5. Both macros rely heavily on the new Displace\_Pixel operator.

with the Displace\_Pixel operator. Then the Median\_Filter is applied to the entire image, thus reducing the amount of noise or the number of pixels that are extremely different from the norm. This loop is repeated once again. The last iteration of the loop does the same thing except that all pixels are displaced by a distance of two instead of one. The final result basically simulates the subtle smudging of oil paint via the Displace\_Pixel operator, and the Median\_Filter reduces the fine detail of colors into irregular blobs characteristic of an impressionist oil painting (Figure 2).

The "\_Fresco" macro takes this aforementioned process one step further by applying the convolution operator "WoodCut" to the entire image. The WoodCut convolution tends to create a more subtle embossing effect, similar to a woodcut printing block (Figure 2). You can see this by loading and viewing this convolution in the

```
DISPLACE_PIXEL (Radius=50, Probability=100)
MEDIAN_FILTER (Threshold=0, for maximum effect)
MEDIAN_FILTER
MEDIAN_FILTER
MEDIAN_FILTER
BLUR (Center Weight=0, Threshold=0)
BLUR
BLUR
```

Notice that I have chosen to use the standard Blur operator rather than the more powerful "Blur5x5" convolution. Why, you ask? Well, it seems that because of the nature of the "Blur5x5" convolution, the top and bottom lines in the final image never get blurred and is most noticeable. It's quite possible that when every pixel on the first line, for example, assumes the center position in the convolution grid, there is no pixel lying above it to be operated on in the grid's weighting process. The same is true for every pixel on the bottom row of the image.

Applying this effect to rotoscoped video via batch processing could yield some wildly interesting results ala MTV. Furthermore, consider varying the Seed parameter for an effect similar to slowly moving your point of view "behind the glass." See, image processing can be fun!

### Etched Glass

Curiosity got the best of me, so I continued exploring additional methods with which to utilize certain key operators to texture images in different albeit related ways. I began to wonder what an image would look like if it were etched onto glass, maintaining most of its color in the end. Here's what I came up

Remember, most, if not all, of these procedures can be paralleled in your favorite image processing application, with minor adaptation.

ADPro operator requester. Notice that the center pixel is given a positive weight of five and the upper left and lower right diagonal pixels are negatively weighted, thus producing a slight ridge.

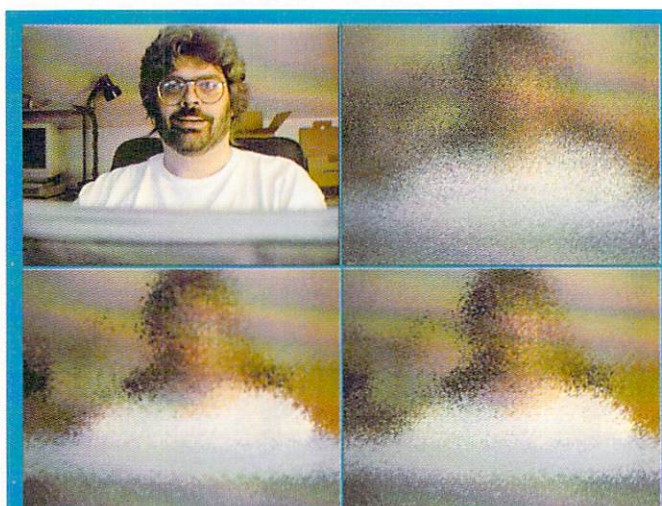
Remember, a fresco is a painting done by applying paint to a semi-moist plaster substance. Inevitably, small undulations will form as the substance dries, but the paint is very well preserved in the plaster. Does the Florentine artist Leonardo daVinci's Sistine Chapel come to mind?

### Tempered Glass

After learning how the OilPaint and Fresco pseudo-operators worked, I decided to play around with the Displace\_Pixel operator a little more to see what larger values for the Radius would do. With Radius set to 50, the result was nearly unrecognizable, but I remembered the effect Median\_Filter had on noisy images so I applied this to the jumbled mess. Although a few minor details needed to be ironed out, for the most part, the Tempered Glass macro was born!

For instance, the edges of the major color blobs were a bit sharp, so I applied the Blur operator several times to take care of this problem. With even more experimentation, I discovered that by applying the Median\_Filter several times before blurring, the color blob regions became increasingly "choked in," forming divot-like regions very much like those shower glass doors I think we've all seen before (Figure 3).

The entire process on a single image then, if you choose to do it manually, is as follows:



**Figure 3:** Shown clockwise are the series of steps taken to achieve a TemperedGlass look on a self-portrait of the author (top left). First, the Displace\_Pixel operator using a Radius of 50 is applied (top right). Next, the Median\_Filter operator is invoked 4 times (bottom right). Finally, the entire image is Blurred 3 times to smooth out the rough edges left by the previous operator (bottom left).



with for an Etched Glass effect. Remember, most, if not all, of these procedures can be paralleled in your favorite image processing application, with minor adaptation.

First, use the familiar pseudo-operator `_Fresco` on your image, which you should now understand how it works. Save this resulting image to the Temp buffer or to your hard drive for later recall. Then use the "LaplacianEdge" convolution at full strength. This convolution highlights, with colored edges against a black background, the areas of significant brightness transitions, resulting in an image that looks quite like an old Lite-Brite board. Since we only want the main outlines, apply the `Color_To_Gray` operator followed by `Line_Art`, which only operates on 8-bit data. Before we composite this image with the Frescoed one in the Temp buffer, we need to expand the 8-bit data to 24-bit, so apply the `Gray_To_Color` operator. Finally, switch on Composite in the Loaders menu, and Load in the Temp buffer at an 80% Mix value. Your results after each step should look similar to Figure 4. Experiment with this Mix value for some surprisingly different variations.

### The Plaster Look

To get an effect closely resembling a color print pressed onto plaster, we'll facilitate the process by once again using another of the included pseudo-operators, `_ColorCharcoal`. For a description of what this macro does, see the comments in the Listing for `_Plaster.adpro` at the end of this article, or simply view it with your favorite text editor.

But first, before you apply this macro, save your image to the Temp buffer or hard drive so you have the original image intact for later composition. Then after invoking the `_ColorCharcoal` pseudo-operator, like before, apply the `Color_To_Gray`, `Line_Art`, and then the `Gray_To_Color` operators in this order. This time now, Composite your original image in the Temp buffer with the current

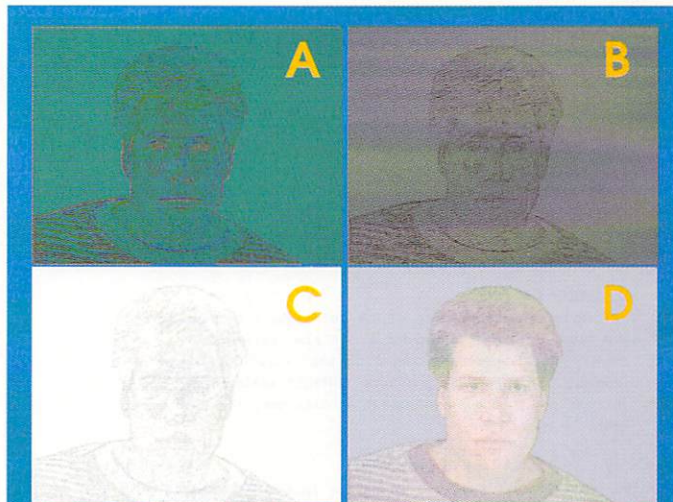


Figure 5: Another variation, this time using the `_ColorCharcoal` macro included with ADPro 2.5 in addition to more edge detection and a final composite with the original image for a realistic "Plastered" look.

one at a 50% Mix value. Check your results against those shown in Figure 5.

I'll leave it up to you to determine how the various operators in `_ColorCharcoal` are utilized. It shouldn't be too hard if you've been following along. Now for those interested in using the included ARExx macros, a brief explanation of a few of the main points you may need to know.

### The Included Macros

As you can see, I've chosen to adopt the style format used by ASDG for typing in the code — much easier and ultimately more efficient. It's also probably good to get into the habit of using the `$VER:` format string directly underneath your script title, so as to be compatible with the "Version" command used in the system environment. As far as program flow, again most of the code is suitably commented for better understanding and my inevitable memory failure.

It's good to see that when you now call a user requester in an ADPro script, normal system requesters are used. The "Okay" requester can now have multiple button selection for user data entry. Cool, although ImageFX allows you to make complete custom-configurable ones. Note that if you are running the public domain program MagicFileRequester, you must disable this if you call a multiple button "Okay" requester in ADPro.

Lastly, you now have several ways of executing your ARExx macros from ADPro 2.5. If you place your macros in either the "Commands2" or "Operators2" subdirectories, they will be listed in the User Commands or Operators windows on ADPro's screen, respectively. Or you can keep your macros anywhere or in the standard assigned ARExx directory and select the User menu item "Execute ARExx Script...", or simply launch them in the traditional hot key method. What flexibility!

### Reader Concerns

It's come to my attention that there are some "newer Amigoids" who feel that this column is "way over their head." Well, what can I say? In my humble opinion, we're merely in ankle-deep, especially after having seen and read about using "Filters" in Photoshop, what I'm covering here is comparatively light stuff. Still, being the sensitive, caring guy that I am, I will consider "doing an article or two to bring newer people up to speed into graphics and image processing." Thanks to Peter Bagnato of Atlantic Beach, Florida for alerting me to this fact. Hope you enjoyed this month's topic. See you next month!

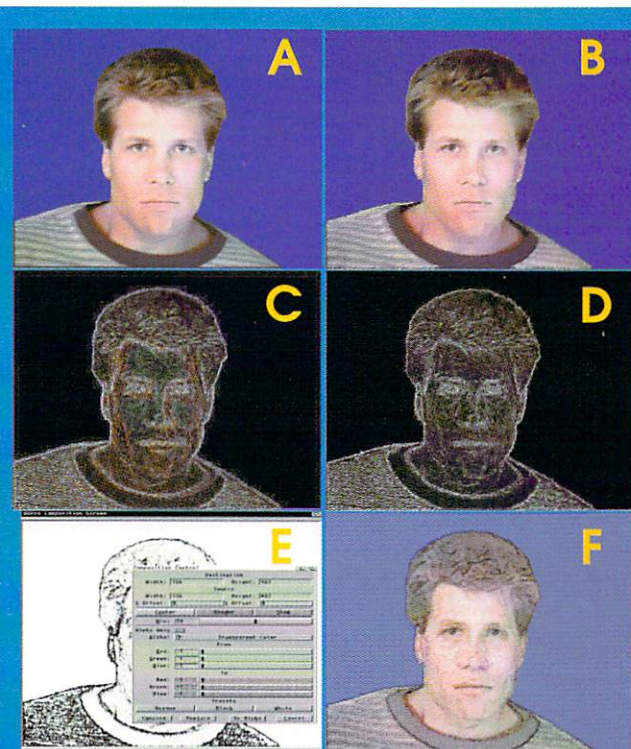


Figure 4: The process of "Etching" an image onto glass. Start with a simple image (A), invoke the `_Fresco` pseudo-operator, and save to the Temp buffer (B). Now convolve using "LaplacianEdge" (C). Convert this image into grayscale using the `Color_To_Gray` operator (D), then perform a `Line_Art` operation, convert back to 24-bit with the `Gray_To_Color` operator, and Composite this image with the Fresco in the Temp buffer (E). The final result should resemble (F).



# EtchedGlass.adpro v1.0

```

/*
** _EtchedGlass.adpro
**
** $VER: _EtchedGlass.adpro 1.0 (7.8.94)
**
**
** DESCRIPTION:
** This ADPro macro makes the currently loaded image appear
** to be etched onto rough, frosted glass.
**
** REQUIREMENTS:
** This script requires ADPro v2.5.0 (or higher) because it
** uses the Displace_Pixel operator. It also calls the
** _Fresco pseudo-operator located in the "ADPRO:Operators2"
** directory, so make sure you have "ADPRO:" assigned and
** "_Fresco" is in the "Operators2" subdirectory for this
** macro to work!
**
** NOTE:
** For convenience, I put all MY macros in the "Commands2"
** subdirectory and prepend them with an underscore "_" so
** that they will show up in the "User Commands" window of
** the ADPro interface and the underscore flags them as
** being written by me.
**
** CREDITS:
** William Frawley (some portions adapted from ASDG macros)
**
*****

OPTIONS RESULTS

ADDRESS "ADPro"

/*
** Definitions
**/

NL = '0A'X /* Shorthand Hex representation of a LineFeed */
TRUE = 1
FALSE = 0
TempDefaults = "T:TempADProDefaults"

/*
** Save the current environment.
**/

SAVE_DEFAULTS TempDefaults

/*
** See what type of data is loaded in ADPro/MorphPlus.
**/

CALL "FREDSCRIPTS:FREDFunctions/CheckForRawImageData" TRUE
IF (RESULT ~= 0) THEN
    CALL ErrorOut 10

/*
** Call another external ADPro macro called _Fresco to
** save some space here! _Fresco operates in this order:
** DISPLACE_PIXEL 1, MEDIAN_FILTER, DISPLACE_PIXEL 1,
** MEDIAN_FILTER, DISPLACE_PIXEL 2, MEDIAN_FILTER,
** CONVOLVE "WoodCut"
**/

CALL "ADPRO:Operators2/_Fresco"

/*
** Save to Temporary buffer for faster recall later.
**/

SAVER "TEMP" "XXX" "RAW" /* "XXX" is just a dummy name */

/*
** Do the "Etching."
**/

```

```

OPERATOR "CONVOLVE" "ADPRO:Convolutions/LaplacianEdge" 100 0
IF (RC ~= 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply convolution matrix."
    CALL ErrorOut 10
END

OPERATOR "COLOR_TO_GRAY"
IF (RC ~= 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Color_To_Gray operator."
    CALL ErrorOut 10
END

OPERATOR "LINE_ART"
IF (RC ~= 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Line_Art operator."
    CALL ErrorOut 10
END

OPERATOR "GRAY_TO_COLOR"
IF (RC ~= 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Gray_To_Color operator."
    CALL ErrorOut 10
END

/*
** Composite our Fresco'd image in Temp with this one at
** an approximately 60-85% Mix value. Note that even a few
** percent variation in this value may produce extremely
** different results. I've found that 80 works best for me.
**
** Uncomment the following lines if you wish to experiment
** with the Mix Value:
**/

Mix=80 /* Set our Mix Value for compositing below */

/* BEGIN COMMENT *
GETNUMBER "Enter a composite Mix Value..." 80 60 90
IF (RC ~= 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "You decided to Cancel the script?"
    CALL ErrorOut 10
END
Mix=ADPRO_RESULT
* END COMMENT */

LOADER "TEMP" "XXX" COMPMIX Mix

/*
** Exit
**/

CALL ErrorOut 0

/*****
/*
** INTERNAL FUNCTIONS
**
*****/

ErrorOut:

    PARSE ARG ExitCode

    IF (EXISTS( TempDefaults )) THEN DO
        LOAD_DEFAULTS TempDefaults
        IF (RC ~= 0) THEN DO
            ADPRO_TO_FRONT
            OKAY1 "Error restoring settings."
        END

        ADDRESS COMMAND "Delete >NIL:" TempDefaults
    END

    EXIT ExitCode

```



## Plaster.adpro v1.0

```

/*
** _Plaster.adpro
**
** $VER: _Plaster.adpro 1.0 (7.8.94)
**
**
** DESCRIPTION:
** This ADPro macro makes the currently loaded image appear
** to be painted onto textured plaster.
**
** REQUIREMENTS:
** This script requires ADPro v2.5.0 (or higher) because it
** uses the Displace_Pixel operator. It also calls the
** "_ColorCharcoal" pseudo-operator located in the
** "ADPRO:Operators2" directory, so make sure you have
** "ADPRO:" assigned and "_ColorCharcoal" is in the
** "Operators2" subdirectory for this macro to work!
**
** NOTE:
** For convenience, I put all MY macros in the "Commands2"
** subdirectory and prepend them with an underscore "_" so
** that they will show up in the "User Commands" window of
** the ADPro interface and the underscore flags them as
** being written by me.
**
** CREDITS:
** William Frawley (some portions adapted from ASDG macros)
**
**...../

OPTIONS RESULTS

ADDRESS "ADPro"

/*
** Definitions
**/

NL = '0A'X /* Shorthand Hex representation of a LineFeed */
TRUE = 1
FALSE = 0
TempDefaults = "TempADProDefaults"

/*
** Save the current environment.
**/

SAVE_DEFAULTS TempDefaults

/*
** See what type of data is loaded in ADPro/MorphPlus.
**/

CALL "FREDSCRIPTS:FREDFunctions/CheckForRawImageData" TRUE
IF (RESULT == 0) THEN
    CALL ErrorOut 10

/*
** Save original image to Temporary buffer to composite
** with Plastered image later.
**/

SAVER "TEMP" "XXX" "RAW" /* "XXX" is just a dummy name */

/*
** Do the Plaster thing!
**
** Call another external ADPro macro called _ColorCharcoal
** to save some space here! _ColorCharcoal operates in this
** order:
**
** CONVOLVE "Sharpen3_3X3", SAVE Image, NEGATIVE,
** COMPOSITE Image 50, CONTRAST 50, APPLY_MAP, COLORIZE,
** SATURATE
**/

CALL "ADPRO:Operators2/_ColorCharcoal"

```

As told by AC Tech #3.4 and Amiga World Aug. '93...

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```

OPERATOR "COLOR_TO_GRAY"
IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Color_To_Gray operator."
    CALL ErrorOut 10
END

OPERATOR "LINE_ART"
IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Line_Art operator."
    CALL ErrorOut 10
END

OPERATOR "GRAY_TO_COLOR"
IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "Could not apply Gray_To_Color operator."
    CALL ErrorOut 10
END

/*
** Composite our original image in Temp with this one at
** an approximately 50% Mix value.
**
** Uncomment the following lines if you wish to experiment
** with the Mix Value:
**/

Mix=50 /* Set our Mix Value for compositing below */

/* BEGIN COMMENT *
GETNUMBER "Enter a composite Mix Value..." 50 30 90
IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "You decided to Cancel the script?"
    CALL ErrorOut 10
END

```



```
Mix=ADPRO_RESULT
* END COMMENT */
```

```
LOADER "TEMP" "XXX" COMPMIX Mix
```

```
/*
** Exit
*/
```

```
CALL ErrorOut 0
```

```
/*
*****
/*          INTERNAL FUNCTIONS          */
*****
```

```
ErrorOut:
```

```
  PARSE ARG ExitCode
```

```
  IF (EXISTS( TempDefaults )) THEN DO
    LOAD_DEFAULTS TempDefaults
    IF (RC == 0) THEN DO
      ADPRO_TO_FRONT
      OKAY1 "Error restoring settings."
    END
  END
```

```
  ADDRESS COMMAND "Delete >NIL:" TempDefaults
END
```

```
EXIT ExitCode
```

## TemperedGlass.adpro V1.1.0

```
/*
** _TemperedGlass.adpro
**
** $VER: _TemperedGlass.adpro 1.1.0 (7.4.94)
**
**
** DESCRIPTION:
** This ADPro macro makes the currently loaded image appear
** to be seen through a tempered shower glass.
**
** REQUIREMENTS:
** This script requires ADPro v2.5.0 (or higher) because it
** uses the Displace_Pixel operator.
**
** CREDITS:
** William Frawley (some portions adapted from ASDG macros)
**
*****/
```

```
OPTIONS RESULTS
```

```
ADDRESS "ADPro"
```

```
/*
** Definitions
*/
```

```
NL = '0A'X /* Shorthand Hex representation of a LineFeed */
TRUE = 1
FALSE = 0
TempDefaults = "T:TempADProDefaults"
```

```
/*
** Save the current environment.
*/
```

```
SAVE_DEFAULTS TempDefaults
```

```
/*
** See what type of data is loaded in ADPro/MorphPlus.
*/
```

```
CALL "FREDSCRIPTS:FREDFunctions/CheckForRawImageData" TRUE
IF (RESULT == 0) THEN
  CALL ErrorOut 10
```

```
/*
** Temper this baby!
*/
```

```
OPERATOR "DISPLACE_PIXEL" 50 100 0
```

```
IF (RC == 0) THEN DO
  ADPRO_TO_FRONT
  OKAY1 "The operator DISPLACE_PIXEL," || NL ||,
    "failed to execute."
  CALL ErrorOut 10
END
```

```
DO i=1 TO 4
```

```
  OPERATOR "MEDIAN_FILTER" 0
```

```
  IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "The operator MEDIAN_FILTER," || NL ||,
      "failed to execute."
    CALL ErrorOut 10
  END
END
```

```
DO j=1 TO 3
```

```
  OPERATOR "BLUR" 0 0
```

```
  IF (RC == 0) THEN DO
    ADPRO_TO_FRONT
    OKAY1 "The operator CONVOLVE," || NL ||,
      "failed to execute."
    CALL ErrorOut 10
  END
END
```

```
/*
** Exit
*/
```

```
CALL ErrorOut 0
```

```
/*
*****
/*          INTERNAL FUNCTIONS          */
*****
```

```
ErrorOut:
```

```
  PARSE ARG ExitCode
```

```
  IF (EXISTS( TempDefaults )) THEN DO
    LOAD_DEFAULTS TempDefaults
    IF (RC == 0) THEN DO
      ADPRO_TO_FRONT
      OKAY1 "Error restoring settings."
    END
  END
```

```
  ADDRESS COMMAND "Delete >NIL:" TempDefaults
END
```

```
EXIT ExitCode
```

•AC•

Please Write to:  
William Frawley  
c/o Amazing Computing  
P.O. Box 2140  
Fall River, MA 02722-2140



(continued from page 30)

### X-CAD Support

Bob Miller-Rhees of Bainbridge Island, WA sent a large packet of copies of correspondence with Digital Multimedia Services in England. Bob writes a newsletter he publishes for CAD on the Amiga, and notes that he and a couple of his newsletter readers are dissatisfied with the service provided by that program's distributor. Basically, he notes that they agreed to provide registered X-CAD3D users with a copy of X-CAD3000 for an upgrade fee, which was never done. The distributor then agreed to compensate him by providing copies of Digital's Symbol Libraries, which to this date has also not been done.

Space here doesn't allow me to reprint the materials he provided, but in addition to his problems with Digital Multimedia, he wanted to make readers aware that GrafX Computing of Panama, NY does a super job of supporting X-CAD. He complimented technical support persons Juan Wilson and Amy Swan on their capable support. In a follow-up letter he received from Richard Nolan, representing the developers of X-CAD 3000, they noted that the authors of the program are a completely separate entity, and are not connected with the distribution company, Digital Multimedia Services.

### Jaggies In WYSIWYG Screen Displays

Robert Bennett of Jericho, NY is very happy with Final Writer's feature set, but he uses an Amiga 1084S and an older Amiga (he does not say which model). He is unable to get the program to display text with good enough resolution to be satisfactorily readable. He notes, *I realize that more and more people are buying the A1200 or A4000. Both of these have the new chip set and allow greater screen resolutions. However, software producers should be aware that there are still a great many 500's and 2000's out there. It is all right to write a program which utilizes the functions of the AGA chipset but if such a program needs that chipset and the higher capabilities those chips offer the public should be made aware of that requirement. It is the same as telling people that a program needs a hard drive or needs DOS 2.0 in order to operate properly.*

### OpalVision Problem With New Motherboards

Robert Iacullo works with a question about the OpalVision board. He notes, *It worked fine when I first got it, but the computer has had two new motherboards since then. The Opalvision board does not work in 24 bit mode with the two new motherboards. Does anyone have a clue about this?*

### Amiga and Ethernet

Everett Greene of Ridgcrest, CA writes *I am interested in seeing what responses you receive to the Ethernet item in your February Amazing Computing column. I was recently investigating the Ethernet subject with the goal of obtaining products to allow the US Navy, China Lake to connect several Amigas to the Base-wide network. Among the non-definitive results of that investigation are: Commodore has disavowed all knowledge of Ethernet and has dropped its A2065 board and associated products. The TCP/IP update supposedly in the mill will probably never happen. Additional copies of the last release are no more.*

I suspect that other Amiga users would like to connect their Amigas to company Ethernet LANs. Comments from those who have already done so, especially without the above discontinued products, are welcome, and will be noted here.

### A3000 SCSI Problem Revisited

Mr. Greene also commented, *The version of the 33C93 chip may only be part of the problem. I suspected the WD chip as a possible cause of the problem in my personal A3000 so I replaced the 33C983A with a 33C93B obtained from Western Digital, no help.*

Our experience at China Lake with the 33C93 is that all versions are faulty in one way or another. We had to alter the design of our in-house boxes to circumvent the defects when WD couldn't seem to get the defects corrected through several revisions and versions of the chip. Lest this seem overly critical of WD, our experience with TI and NCR chips has been that those devices also have their less than optimal design and/or operational "features" as well.

### Expansion Systems Dataflyer and the A1000

Mr. Greene also included a bug report and workaround for the Expansion Systems Dataflyer. He writes, *The hardware works fine, however, the programs which worked correctly on an A3000 got spectacular flameouts on the A1000. The failures were deduced to be an apparent bug in the SCSI driver supplied by Expansion Systems. The driver seems to completely mishandle the auto-sense option of "SCSI Direct" calls. The bug can be circumvented by not using the auto-sense option and placing the burden of handling the "check condition" on the application program.*

### Problem with Magtape command

On a similar issue, Mr. Greene reported, *I've encountered a near bug with AmigaDOS 2.X's Magtape command. Units which report a check condition for the first command after a hard reset (per the ANSI standard) are reported to be "not ready" by magtape. This is no big deal if you're familiar with the standard and realize that the purported error really isn't. However, it can be quite disconcerting to the uninitiated.*

*My complaint about magtape's misleading "error" report is that I have been unable to find a way to kill the report when invoking it from ARExx programs. I've developed some data reduction programs for the Navy which are designed to be "canned" processes for use by technicians and unsophisticated computer users. In these processes, magtape is invoked to ensure the tape having been rewound from any previous use prior to retrieving data from it. The only thing I can seemingly do is verbally tell the users to ignore the "error" reported by magtape and continue operation. There has to be a better way.*

That's all for this month. If you have any workarounds or bugs to report, or if you know of any upgrades to commercial software, you may notify me by writing to:

John Steiner  
c/o Amazing Computing  
Box 2140  
Fall River, MA 02722

...or leave EMail to  
John Steiner on Portal  
73075,1735 on CompuServe  
Internet mail can be sent to  
John\_Steiner@cup.portal.com  
FAX John Steiner at (701)280-0764  
(8:30 A.M. to 5:30 P.M. Central time, Monday-Friday)



# I N S I D E

# ARexx

by Merrill Callaway

## Create a Glossary Function for FinalWriter using ARexx

The programs this month were inspired by exasperation over problems in the FinalWriter ARexx interface, and compassion for Gary Wainright, a determined Amiga user who spent a small fortune calling me long distance from Georgia, seeking advice about FinalWriter ARexx macros. Gary asked for a glossary function in FinalWriter to help in his law practice.

The unacceptable ARexx interface in FinalWriter needs to be pushed up to the standard of the rest of the product. In the meantime there are work-arounds. Gary had the bad luck to pick FinalWriter for his first project in ARexx Interprocess Control (IPC). I'll reveal some of the convoluted tricks necessary to code IPC routines in FinalWriter.

### No Give and Take

It is easy to write a simple macro to load a font or format a document in FinalWriter, but that is not the primary use for ARexx with a word processor. The minute you need to access another program from FinalWriter, or even access and transfer text between different open documents within FinalWriter itself, you run into trouble. SoftWood doesn't seem to care that ARexx is give and take, send and receive. They fail to implement in ARexx access to the larger environment in which FinalWriter can operate. The major problem of the ARexx interface for FinalWriter is not a lack of commands, but a waste of the RESULT variable. For example: using ARexx in FinalWriter, if you OPEN a document successfully, RC=0 and RESULT=RESULT (RESULT is unsigned!). The inevitable questions: What is the ARexx port name of the new document? How can I shift the ARexx Address over there in order to insert or get text? Incredibly, you cannot, using only FinalWriter ARexx commands. FinalWriter has a STATUS PORTNAME command, but the Catch-22 is, you can't get over there (by changing the ADDRESS) to execute this command until you know the new portname! The NEW command is flawed this way, too. THE PORTNAME OF A NEW OR OPENED DOCUMENT MUST BE RETURNED IN THE RESULT VARIABLE! To waste the RESULT variable like this is frustrating and necessitates much otherwise unnecessary code.

### Custom Functions for NEW and OPEN

Before I could make the glossary macro, I had to write two custom replacement ARexx functions which return the correct RESULT variable. I named them OPENDoc.rexx and NEWDoc.rexx. They must go in the REXX: directory. For some arcane reason, FinalWriter will not execute them correctly from the FWMacro drawer, even when their complete path is supplied in the call. As in the March column's envelope print macro, I take advantage of the ARexx built-in function SHOW(P) to get a list of open ports. March's work-around for NEW made the wrong assumption that FinalWriter opens each new port number as the largest plus one. Rather, FinalWriter fills in the lowest vacant position in port

numbers. Open four FinalWriter documents, and then close the first two, (FINALW.1, FINALW.2). The next document gets a port name of FINALW.1, not FINALW.5, and the one after that, FINALW.2. Only then does the next document become FINALW.5. My first try at programming this progression involved sorting the numbers of the ports and finding the lowest available vacancy rather than the maximum. Then I noticed that the list of port names — the RESULT of SHOW(P) — reads from left to right from the earliest to the most recent port names opened. In my code, a LASTPOS() function finds the rightmost (latest) "FINALW." and then the program parses off the port name. An EXIT portname instruction returns the new port name back to the caller program in the RESULT variable.

When you do not know the new port name *a priori*, you cannot use waitforport (a command utility). I coded the small DELAY() loop in place of waitforport. The DELAY() function is a support library function, whose library must be loaded before it can be used. The DELAY() function is the correct way to stall for time without taking up system resources. Once libraries load, they stay loaded, so the SetUp.rexx program is included to show you how to load a collection of ARexx libraries from the user-startup sequence. You may modify the SetUp.rexx program to reflect your collection of libraries. Make sure to change the DO loop iteration specifier as well. Just run SetUp.rexx once, before Glossary. In DELAY(n), the argument integer n effects n/50ths of a second delay. The amount of delay can be tuned to get optimum speed. DELAY(20) is ideal for an A-3000. Whew! A whole program to substitute for only one line of code, had it been done correctly! NEWDoc.rexx will work as a stand alone program or as an external function from any other ARexx program. It will start up FinalWriter if it is not running. OPENDoc.rexx is similar except that it is intended to work only from a FinalWriter macro.

### The Glossary Macro

A glossary function is a batch Find and Replace. A Glossary is different from a Merge feature. FinalWriter's merge feature prints several documents, each containing different data in each field. You cannot view or save FinalWriter documents with merged data. A glossary, however, lets you view and save a document after replacing many strings with different strings.

(continued on page 43)



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FEATURES	WarpEngine	GVP 040/40	FastLane
28MHz, 33MHz, 40MHz versions	YES	NO	NO
28MHz Upgradable to 33 and 40MHz	YES	NO	NO
Expandable Onboard to 128MegaBytes Ram	YES	NO	YES
Built in SCSI-2 Hard Drive Controller	YES	NO	YES
Uses Industry Standard SIMM Modules	YES	NO	NO
Uses any Combination of SIMMS	YES	NO	NO
Allows use of the Memory from the Amiga	YES	NO	NO

28 MHz... **\$839** 33MHz... **\$1299** 44 MHz... **\$1579**

**RETINA**  
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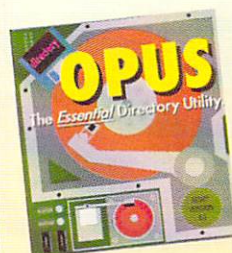
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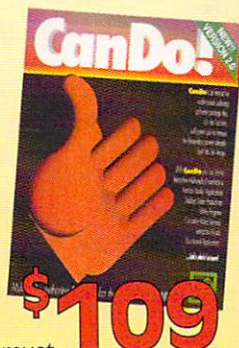
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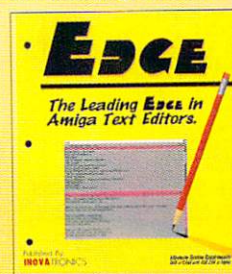
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The CanDo software authoring package allows you to take advantage of the Amiga's powerful architecture, regardless of your technical abilities. You can program anything from a simple presentation to the most advanced professional application program in record time. In short, CanDo takes the guesswork and drudgery out of programming and lets the creative genius in you run wild.

CanDo's scope and performance makes it a must for training, simulation and other applications.



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## GIGAMEM

GigaMem virtual memory system lets your Amiga utilize unused hard drive space as RAM, eliminating the need for additional hardware! With GigaMem you can run memory-hungry programs (such as Art Department, LightWave, CanDo and PageStream) without running low on memory.



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Requires an 020/030/040 based Amiga with MMU and OS version 2.1 or higher.

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### PROFESSIONAL PAGE 4.0

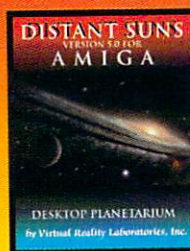
Automatic Genie functions automate most routine page layout and DTP tasks. Page Genies automatically create custom page layouts. Function Genies provide new ease of use and user customization of program. New features include: undo button, irregular text wrap, enhanced color separation and under color removal algorithms, auto-tiling for output of larger pages.

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Hardware Requirements:  
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Create bitmap and outline fonts for all your programs! Convert between PostScript, Compugraphic and Soft-Logik formats. Autotrace bitmaps and generate bitmaps from outline fonts. Automate font creation with AREXX. Copy and paste characters between fonts, and add professional hinting to your fonts. Compute, Amazing, Amiga Format and AmigaNews all called TypeSmith a must-have program. Voted best DTP utility by Amazing's readers.





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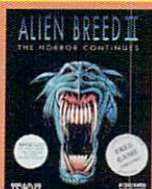
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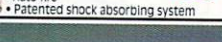
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(continued from page 38)

## Operating Instructions

Functions OPENDoc.rexx, NEWDoc.rexx and SetUp.rexx go into your REXX: directory. The Glossary program goes into your FWMacros drawer. Assign the Glossary program as an ARExx program button in the user button strip (I used a "G" button). With a document loaded which you wish to make a glossary for, click on the "G" button. A prompt will ask, do you want to use a glossary or make one.

### Make a Glossary

Choose Make. Depending on whether a string was selected or not before "G" was clicked, a requester will ask you either to type in the REPLACE string (if a string was selected), or (if none was selected) it will ask you if you want to type in a FIND string. If you do, then a REPLACE string requester will come up. Click on the "G" button each time you want to add another find/replace string pair to the glossary. You may select the find string before clicking on "G" or type it in after clicking on "G". The first requester only comes up the very first time you make a glossary. Every other time, you get the FIND/REPLACE requesters (no string selected) or just the REPLACE requester (if you have selected a string).

When you have NOT selected a string, the "No string selected. Type one in?" requester serves a double purpose to Make Glossary when you are done. After you have all the strings you want, click on "G" WITHOUT a string selected, and choose Make Glossary to enter the second stage where the program makes a glossary document from all the strings you selected.

### Find/Replace or Edit?

A requester then asks you do you want to search and replace the original file using the glossary, or do you want to edit the glossary. If you edit, you select the numbered entry to fix, and are presented with both the find and replace strings to edit, in string requesters. Use the requesters to edit the file. DO NOT edit this glossary file directly at this point. The edit routine must change both the file and the clip list. When you are done, enter a 0 to signal you are done. Then choose find/replace or you can abort. After find/replace, you have a chance to save the glossary to reuse later. If you need to do extensive edits or remove entire entries, it is better to abort, save the glossary, edit it normally, and start again and specify you want to Load/Use a Glossary.

### Use a Glossary

The very first requester that only comes up once per session, asks you do you want to use a glossary. If you have saved or created a glossary from before, you can load and use that glossary instead of creating it. You will have a final opportunity to abort before the find/replace. If you create a glossary on your own, make sure it is a FinalWriter document, and use the format:

```
FINDSTRING 1:string
REPLSTRING 1:string
FINDSTRING 2:string
REPLSTRING 2:string
etc.
```

because the program uses that exact format. The error trap is unsophisticated, and it's up to you to format your glossary as specified. The test for the initial string in a glossary file is only to screen out gross errors.

### Program Structure

Loops would have been too nested and convoluted, since the program should both make and edit the data along the way, OR call up a saved glossary document to use as the find/replace data. It has to respond to either a selected string or no selected string, and yet be able to branch from one task to another. All these branches suggested a decision tree with several branches, each leading to a dead end where the program would exit. Logically:

(The program is to be run repeatedly, exiting each time you add a pair, AND performing the final find/replace IF you want.)

OR

(It is to load the glossary AND perform the find/replace IF you want.)

### Use the Clip List for Values to Persist

This logic implies that find and replace string values and a counter must persist between programs. This calls for the ARExx Clip List, a group of case sensitive (name,value) pairs created with SETCLIP(name,value), erased (freed) with SETCLIP(name), and retrieved with GETCLIP(name). The clip list (name,value) pairs persist until you reboot or until you reset or free their values. The program contains several internal functions that are CALLED from the main program. Two of these, GlossaryCleanUp and CloseDown, are to free the values in the clip list (to unassigned values) once we are done. Subroutines are called from different branches in our decision tree, so we implement them as internal functions. A counter, a flag for the initial requester, and compound symbol token values for the numbered find and replace values are all maintained in the clip list. Note the rather long and case sensitive names. This insures that another program will not interfere with clip list values. They are global.

### Program Flow and Code Notes

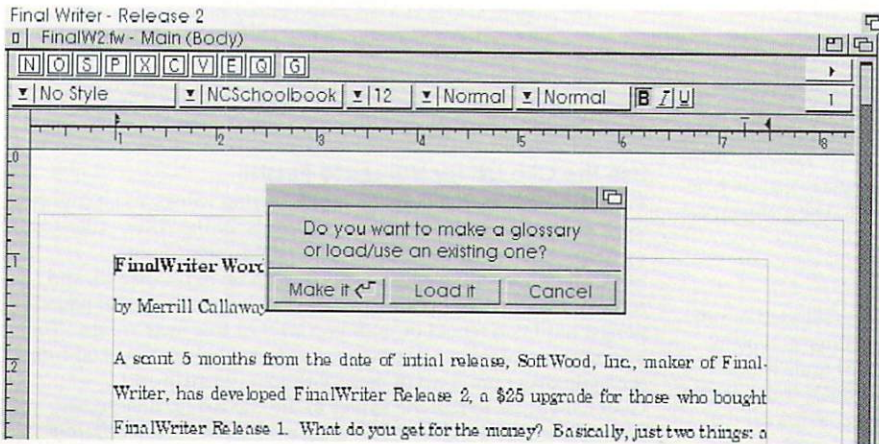
OPTIONS RESULTS is necessary whenever you need to obtain results from a function call. It also must occur inside the internal functions, or they won't work correctly. All variables are to be exposed, so there are no PROCEDURE instructions in the internal functions to protect the variables by setting up a new symbol table.

The original document's port name is assigned to the symbol oldport. The value of the initial requester flag (unassigned or 1) is assigned to the symbol, request. Assuming this is the first time through, request is not equal to 1 so ShowMessage prompts whether to make or load/use a glossary. ShowMessage responds in the RESULT variable according to which button you click, 1, 2, or 3. Since make glossary occurs directly after this code there is no need to test for RESULT=1. RESULT=2 calls the LoadGlossary internal function, and RESULT=3 exits (no need at this point to clean up any clip list entries). Assume the program goes to MakeGlossary. After OPTIONS RESULTS, MakeGlossary calls SETCLIP to set the requester flag to 1 so that requester won't come back during this glossary. Only after a final exit when CloseDown is called, will this flag be unassigned again. The overall string counter is retrieved and incremented. It may be unassigned, so the first time it is initialized to 1. Then it's clip list entry is reset to the new value. The program attempts to Copy (a FinalWriter command). RC, the return code indicates if a string was selected or not. If not, a three way ShowMessage offers us the option of entering a find string, making the glossary, or canceling.

This time canceling will need to erase some clip list entries, so it calls those routines. A select block is used to take care of RESULT=1, 2, or 3. If you choose to type in both find and replace strings (RESULT=1), then: A RequestText takes care of putting a findstring into RESULT. Then this findstring is put into a numbered compound symbol in the clip list. Note the way to make compound symbols (arrays) names in the clip list. The same procedure is used to get and set the replace string into the clip list.

When RESULT=2, we have chosen to "Make Glossary". This enters the MakeGlossary function where the first thing we do is use our NEWDoc.rexx function. External functions may have these formats: NEWDoc, NEWDoc(), NEWDoc.rexx, but ARExx searches first for '.rexx' as a qualifier, so the long format runs a trifle faster. NEWDoc() is more expressive of a function, however. My new function returns the portname, so a direct assignment instruction puts the new port name into the variable newportname. An ADDRESS VALUE sets the current address to the value of newportname (ADDRESS newportname would set the address to 'NEWPORTNAME' a literal). Now in the new document, a loop makes a long expression of each pair of find and replace strings. Note how line feeds ('a'x = hex 10) are formatted in ARExx. Note





Left: A glossary function is a batch Find and Replace.

also the concatenation operator "||", and the use of a function embedded into the expression directly. ARExx evaluates the functions first and inserts these values into the expression and evaluates the result string. Type (FinalWriter command) types the whole result string into the new document as if you had done it from the keyboard!

After the find/replace pairs are in, you may want to change something, so a ShowMessage asks you. RESULT=1 calls for the SearchAndReplace internal function, RESULT=2 calls for the edit routine, and RESULT=3, the OTHERWISE does nothing (NOP). After the calls return, the next instructions are to clean up and exit.

### SearchAndReplace Internal Function

This is a loop which starts by calling MoveSOF, a Move Start Of File subroutine (called more than once in different areas), to move the cursor up to the start of the file. It uses a Cursor instruction accompanied by the Ctrl and Alt Down and Up qualifiers. The numbered strings are retrieved from the clip list and searched for. On the first iteration, the Find requester is not open, thus a single Find opens it. Subsequently,

Find findstring

selects (highlights) the find string. Since there may be an unknown number of these strings, all of which need replacement, I use a DO FOREVER loop that exits based upon the RC from a series of FindNext commands. Every time the string is found it is Cut and a

Type replstring

replaces it. Why not use Find/Replace? The ARExx control of FinalWriter's Find/Replace requester only opens it. Lamentably, you may not feed its string gadgets from ARExx. My code is a work-around to that shortcoming. My SearchAndReplace function returns no value.

### EditGlossary Internal Function

RequestText is used to get the number of the entry you want to change. A zero signals you are done. Error checking to insure that your entry is numeric, SIGNALs the start if it's not. It is tricky to put message strings into a RequestText requester when the message strings are themselves expressions containing variables. Note the way expressions are given names such as text1, etc., and then put into the requester call, surrounded by ""quoted quotes"". Otherwise, they won't be read properly by FinalWriter. It's looking for exactly three strings, in quotes. The loop repeats for as long as you don't enter a zero. It does two things. It changes the clip list and it replaces the string in the glossary document itself. At the end a ShowMessage lets you call SearchAndReplace, or EditGlossary (again).

### LoadGlossary Internal Function

This function uses OPENDoc.rexx to open a finished glossary. SelectAll highlights all the text, and Extract puts the entire text into the RESULT variable. The program parses it into components and loads up the clip list before we can call SearchAndReplace. A crude error checker looks for 'FINDSTRING 1:' as the first characters before proceeding. The interesting code relates to PARSE using variable patterns. Pattern parsing removes the pattern from the result string. This is convenient, since we want only the part between patterns, while g numbers the entries going to the clip board. PARSE VAR glosstext extracts strings between three variable patterns, (pattern1), (pattern2), and (cr). (cr) is a carriage return. PARSE gets everything after (pattern1) and before (cr) and assigns it to findstr.g; then it does something similar for (pattern2) and (cr). The rest of the text is put back into itself, glosstext, ready for the next pair to be assigned.

Finally a loop sets the clip list entries from the array generated above. The total count is also set in the clip list. A requester asks us one last time if we want to search and replace. After SearchAndReplace returns control, the program calls clean up and close down and exits.

## Listings

### Glossary

```

/* ===== */
/* Glossary. Opens a document and prompts for pairs */
/* of values, the first being the search value and */
/* the second being the replace value. Sequentially */
/* finds and replaces every value pair as a batch. */
/* ===== */
/* FinalWriter macro */
/* written by Merrill Callaway */
/* $VER: Glossary 1.0 copyright 1994 by */
/* Merrill Callaway */
/* ===== */
OPTIONS RESULTS

/* Get selected strings in a loop. */
/* If none, prompt for one */

Status PortName
oldport=RESULT

request=GETCLIP('MakeGlossaryFlagRequest')

IF request=1 THEN DO
/* make glossary or use existing one? */
ShowMessage 1 1 "Do you want to make a glossary ",
"or load/use an existing one?" "",
"Make it" "Load it" "Cancel"
IF RESULT=2 THEN CALL LoadGlossary
IF RESULT=3 THEN EXIT 0
END

/* default is to make glossary */
/* Make a Glossary from selected or typed text. */

MakeGlossary:
OPTIONS RESULTS

```



```

CALL SETCLIP('MakeGlossaryFlagRequest',1)
/* Establish count of how many strings have been selected. */
n=GETCLIP('FWstrcount')
IF DATATYPE(n,W) THEN n=n+1;ELSE n=1
CALL SETCLIP('FWstrcount',n)

COPY
IF RC=10 THEN DO
  ShowMessage 1 1 "Find string not selected.",
  "Do you want to enter one?" "",
  "OK" "Make Glossary" "Cancel"
SELECT

WHEN RESULT=1 THEN DO
  RequestText "Find String" "Type in FIND string." ""
  findstring=RESULT
  CALL SETCLIP('FWfindstr',n,findstring)
  RequestText "Replace String",
  "Type in REPLACE string." findstring
  repstring=RESULT
  CALL SETCLIP('FWrepstr',n,repstring)
  EXIT 0
END

WHEN RESULT=2 THEN DO
  newportname=NEWDoc.rexx
  ADDRESS VALUE newportname

  DO k=1 TO n-1
    findstr.k='FINDSTRING 'k':GETCLIP('FWfindstr.k')||,
    'a'x||'REPLSTRING 'k':GETCLIP('FWrepstr.k')||'a'x
    type findstr.k
  END k

  /* do find and replace or edit glossary here */
  ShowMessage 1 1 "Glossary List.",
  "Do you want to batch replace?" "",
  "OK" "Edit Glossary" "Cancel"

  SELECT
  WHEN RESULT=1 THEN CALL SearchAndReplace

  WHEN RESULT=2 THEN CALL EditGlossary

  OTHERWISE NOP /* cancel go to cleanup and exit */
  END /* select */

  /* clean up clip list and close doc */
  CALL GlossaryCleanUp
  CALL CloseDown 1
  EXIT 0
  END /* OUTER result=2 */

OTHERWISE DO
  CALL GlossaryCleanUp
  CALL CloseDown 0
  EXIT 0
END

END /* select block */

END /* if block */

/* If you have selected a string */
Extract
findstring=RESULT
findstring=STRIP(findstring,T,'a'x)
CALL SETCLIP('FWfindstr',n,findstring)
RequestText "SELECTED FIND String",
"Type in REPLACE string." findstring
repstring=RESULT
CALL SETCLIP('FWrepstr',n,repstring)

EXIT 0 /* MakeGlossary */

/* search and replace findstring with replstring in orig. doc. */
SearchAndReplace:
OPTIONS RESULTS
ADDRESS VALUE oldport
WinToFront
DO r=1 TO n-1
  /* move to top of document */
  CALL MoveSOF
  findstring=GETCLIP('FWfindstr.r')
  replstring=GETCLIP('FWrepstr.r')

  IF r=1 THEN Find
  Find findstring

DO FOREVER
  Cut
  Type replstring
  FindNext
  IF RC=0 THEN LEAVE

```

```

END /* do forever */

END r
RETURN

/* edit the Glossary */
EditGlossary:
OPTIONS RESULTS

text1="Find/Replace String"
text2="Type Find/Repl No. 1 - "n-1". 0=Done."

text3="Find String"
text4="Edit Find String"

text5="Replace String"
text6="Edit Replace String"

/* watch the quotes! */
DO FOREVER
  RequestText "'text1'" "'text2'" 1
  frnum=RESULT

  /* error/input control */
  IF frnum=0 THEN LEAVE
  IF -DATATYPE(frnum,W) THEN SIGNAL EditGlossary
  IF frnum>n-1 THEN SIGNAL EditGlossary

  oldfind=GETCLIP('FWfindstr',frnum)
  RequestText "'text3'" "'text4'" oldfind
  newfind=RESULT
  CALL SETCLIP('FWfindstr',frnum,newfind)
  CALL MoveSOF
  Find 'FINDSTRING 'frnum
  Find oldfind
  Cut
  Type newfind

  oldrepl=GETCLIP('FWrepstr',frnum)
  RequestText "'text5'" "'text6'" oldrepl
  newrep=RESULT
  CALL SETCLIP('FWrepstr',frnum,newrep)
  CALL MoveSOF
  Find 'REPLSTRING 'frnum
  Find oldrepl
  Cut
  Type newrep

  END /* do forever */

ShowMessage 1 1 "Batch replace?" "" "",
"OK" "Edit Glossary" "Abort"
IF RESULT=1 THEN CALL SearchAndReplace
IF RESULT=2 THEN SIGNAL EditGlossary
/* Abort just return */
RETURN

/* clean up all clip list variables used */
GlossaryCleanUp:
OPTIONS RESULTS
count=GETCLIP('FWstrcount')
DO k=1 TO count
  CALL SETCLIP('FWfindstr.k')
  CALL SETCLIP('FWrepstr.k')
END
CALL SETCLIP('FWstrcount')
RETURN

/* close down glossary document */
CloseDown:
OPTIONS RESULTS
ARG file
IF file THEN DO
  ADDRESS VALUE newportname
  WinToFront
  Close
  END
ADDRESS VALUE oldport
WinToFront
CALL MoveSOF
CALL SETCLIP('MakeGlossaryFlagRequest')
RETURN

/* movesof */
MoveSOF:
CtrlDown
AltDown
Cursor UP
CtrlUp
AltUp
RETURN

```



```

/* Load a Glossary from a file */
LoadGlossary:

OPTIONS RESULTS
CALL SETCLIP('MakeGlossaryFlagRequest',1)
newportname=OPENDoc.rexx
ADDRESS VALUE newportname
WinToFront
SelectAll
Extract
glosstext=RESULT

IF LEFT(glosstext,13)='FINDSTRING 1:' THEN DO
  ShowMessage 1 1 "File is not in",
    "glossary format." "" "OK" "" ""
  IF RESULT=1 THEN DO
    CALL CloseDown 1
    EXIT 0
  END
END

g=1
DO WHILE glosstext ~= ''
  pattern1='FINDSTRING 'g':
  pattern2='REPLSTRING 'g':
  cr='a'x
  PARSE VAR glosstext,
    (pattern1) findstr.g (cr),
    (pattern2) replstr.g (cr),
    glosstext
  g=g+1
END
g=g-2

/* put results into clip list */
DO h=1 TO g
  CALL SETCLIP('FWfindstr.h, findstr.h)
  CALL SETCLIP('FWreplstr.h, replstr.h)
END

n=g+1
CALL SETCLIP('FWstrcount',n)
ShowMessage 1 1 "OK to Find",
  "and Replace all strings?" "",
  "OK" "Abort" ""
IF RESULT=1 THEN CALL SearchAndReplace
CALL GlossaryCleanUp
CALL CloseDown 1
EXIT 0

```

## NewDoc

```

/* ===== */
/* NewDoc.rexx FW new document return its port name */
/* RESULT=portname */
/* FinalWriter macro/function */
/* Must go in REXX: directory */
/* Stand alone or call as a function from a FW macro */
/* ===== */
/* written by Merrill Callaway */
/* $VER: NewDoc 2.0 copyright 1994 by */
/* Merrill Callaway */
/* ===== */
CALL TIME(R)
OPTIONS RESULTS

/* launch new FW document, find new portname */

/* is there a copy of FW running? */
portlist=SHOW(p)
num=LASTPOS('FINALW.',portlist)

/* no copy running */
IF num=0 THEN DO
  /* NOTE: Put in your own path name for FinalWriter */
  ADDRESS COMMAND 'RUNBACK Video:FinalWriter/FinalWriter'
  ADDRESS COMMAND 'WAITFORPORT' FINALW.1
  EXIT 'FINALW.1'
END

PARSE VAR portlist =num lastportname .

/* is host address in FinalWriter? If not, put it there */
IF LEFT(ADDRESS(),7) ~= 'FINALW.' THEN,
  ADDRESS VALUE lastportname

/* start a new document */

New

/* waitforport when you don't know portname */

```

```

DO FOREVER
  CALL DELAY(20)
  portlist=SHOW(p)
  num2=LASTPOS('FINALW.',portlist)
  /* is there a new port on line? */
  IF num2=num THEN LEAVE
  IF TIME(E)>30 THEN EXIT 20
END

PARSE VAR portlist =num2 newportname .
EXIT newportname

```

## OPENDoc

```

/* ===== */
/* OPENDoc.rexx OPEN FW document return port name */
/* RESULT=portname */
/* FinalWriter function */
/* Must go in REXX: directory */
/* Stand alone or call as a function from a FW macro */
/* ===== */
/* written by Merrill Callaway */
/* $VER: NewDoc 1.0 copyright 1994 by */
/* Merrill Callaway */
/* ===== */
CALL TIME(R)
OPTIONS RESULTS

Status PortName
oldportname=RESULT

portlist=SHOW(p)
num=LASTPOS('FINALW.',portlist)

PARSE VAR portlist =num lastportname .

/* OPEN a new document */

Open

/* waitforport when you don't know portname */
IF RC=0 THEN EXIT 20
DO FOREVER
  CALL DELAY(20)
  portlist=SHOW(p)
  num2=LASTPOS('FINALW.',portlist)
  /* is there a new port on line? */
  IF num2=num THEN LEAVE
  IF TIME(E)>30 THEN EXIT 20
END

PARSE VAR portlist =num2 newportname .
EXIT newportname

```

## Setup

```

/* Setup.rexx Loads ARexx Libraries */

/* NOTE: erase the libraries you
do not have, or do not want to
load at startup. Run this program
in your user-startup as follows:
** rx setup.rexx
** Put this program in REXX: directory
** If you erase a library, change the
** iteration of the DO loop as well.
*/

libs.1='rexsupport.library'
/* extended functions (DOS,etc.) */

libs.2='rexarraylib.library'
/* intuition, windows, gadgets */

libs.3='rexmathlib.library'
/* sin, tan, cos, and other math functions */

libs.4='rexutil.library'
/* Public Domain rexutils */

libs.5='rexarray.library'
/* Dineen Edwards Group array functions */

DO i=1 TO 5
  IF ~SHOW('L',libs.i) THEN CALL ADDLIB(libs.i,0,-30,0)
  IF ~SHOW('L',libs.i) THEN SAY libs.i 'failed to open.'
END

EXIT 0

```

•AC•

Please Write to:  
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# Sync Tips

Definitive  
How-to  
for  
Video  
by Oran Sands

## Video Color Correction with your Amiga

One of the least understood features of any video camera is the White Balance control. This is probably because the manual never explains what it is, telling you only how to set it. Some cameras now have automatic white balancing so you never even touch the white balance controls. In the case of white balancing ignorance is NOT bliss, in fact it's downright dangerous!

### A SHORT LESSON IN WHITE BALANCING

Despite the wonderful advances in video over the years your camera/camcorder still hasn't a clue as to what color "white" is. It just knows what it ought to be. Theoretically "white" is a mixture of red, green and blue. Unfortunately this describes a perfect white which you'll never find in nature. The actual percentages of red, green and blue vary depending upon the source of the light i.e. sunlight, incandescent (tungsten), florescent lighting or a mixture of light sources. Although all of these sources look "white" to us our cameras see these light sources for what they really are, colored sources of light. Our eyes see the colors but our brain interprets the overall combination as "white". Occasionally we see the light for what it is; sodium lights look very yellow, particularly when seen at a distance. But spend any time in a parking lot lit with sodium lights and you'll eventually see it as white light. Our cameras don't have that adaptability so we have to let them know what combination of colors make up "white" at any particular moment. And that's the reason for the white balance controls on your camera.

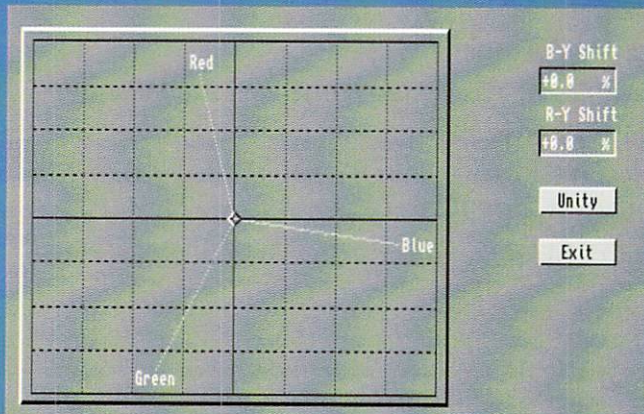
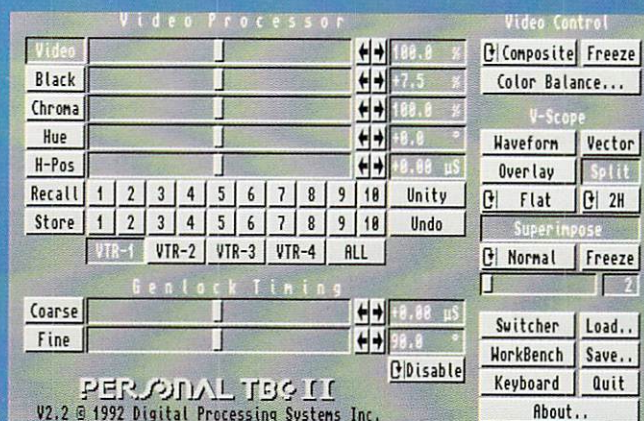


When you flick that switch to Sunlight you're telling the camera that there is more blue in the light than usual (or more red in the case of tungsten light). This allows the camera to rebalance the r,g,b outputs of the pickups to accurately reflect the colors in the scene you're shooting. Of course, the settings built into the camera are those designed for an "average" sunlight (or tungsten-lit) scene and aren't really perfect for your lighting. That's why I always suggest that you manually white balance if your camera allows it. By focusing on a white card and manually balancing for white, you make sure that the camera knows what "white" is at that very moment, in that particular light. And since the color of sunlight changes through-out the day, you need to rebalance the camera about once an hour to make sure you're "on target". ➔

### Picture One: Are You Blue?

An example of an incorrectly adjusted color balance during filming.





This brings us to our topic of the month. What do you do if your incorrectly balanced? Say you've shot inside all day with your camera set on "daylight". Or the most likely of circumstances, shooting indoors, set on "Indoors" but most of the light is actually sunlight coming through the windows. The resulting video can be overly reddish or bluish (see Picture 1) depending on the situation and you'll find that the "tint" or "hue" control on your TV doesn't change the balance but merely gives you a whole new set of "bad" colors. The problem is that there is literally too much blue or red in the signal and somehow we must reduce it.

There are two approaches to color reduction using your Amiga. One is a bit more expensive than the other but both use equipment that you probably already have or should have. I'll describe the first technique since it'll help you better understand the second.

### DPS PERSONAL TBC AND V-SCOPE

Do you have one of those nifty internal TBC's? I do, it's a DPS Personal TBC and it's very useful in stabilizing video signals. You can also use it as a processing amplifier giving you control over the chroma, hue, and video level as well as other parameters (see Figure 1). There is also another feature that allows you to shift the encoding of the red, green, blue signals. Normally I'd say **LEAVE THESE ALONE**, since you can really mess up an image by tweaking these settings. But for this month's purposes, this is just what the doctor ordered. I also have a DPS V-Scope which is very handy for monitoring my video signals allowing for the checking of video and sync levels, hue (tint), and chroma levels as well. Without some method of measuring your signals, any corrections you make are guesswork.

Looking at the axis of Figure 2 you'll see the various primary and secondary colors located around the screen (think of the axis as being on a clock face). At the center of the two axis is the location of the color "white" as the electronics define it. If your camera is correctly balanced a white subject would cause there to be a blob of activity about the center of a vectorscope display (see Figure 3). Note that the vectorscope face looks the same as the color balance screen. If there is too much blue in the picture then the blob would be off center, moving towards the blue location on the vectorscope display (see Figure 4). What we want to do is create a situation that subtracts the blue causing that blob to pull back to the center of the vectorscope display

We could literally subtract the blue but electronically that's not that easy. So what we'll do is to add the compliment color, the color that is directly across the center of the vectorscope display from



From Top to Bottom: figures 1 through 4. Top Right: figure 5.



your blue. That color (see Figure 2) is yellow. Of course the blue we have may not be pure blue and somewhat magenta-ish. In that case the color we want will be not pure yellow but a greenish yellow. Since we think of the vectorscope as a clock face, if your offending color is at 5 o'clock on the clock dial then you'll find your "opposite" color at 10 o'clock.

By adding in our compliment color we change the balance of colors bringing the overall balance back closer to the center of the vectorscope. The examples I've provided here (see Figure 4 & 5 and Picture One) are exaggerated and show a great deal of blue being present and a large amount of yellow being added to compensate. In real life the amounts are much smaller. With the DPS TBC the way to "add" the yellow (or required color) is to change the actual balance of colors that the TBC processes. Using the color balance screen we simply move the balance point from the normal position at the center and offset it towards the color we wish to add. Without a vectorscope of some sort this will have to be done visually. If that's your only choice then look for a coloration of the whites in the picture, shoot for a non-tinted white and pay particular attention to the flesh tones. Studies show that most people consider a picture "normal" if flesh tones appear correct, regardless of the actual color balance.

Offsetting the color encoding balance will bring the picture back to where it should have been had you been correctly white balanced in the beginning. Just one reminder though, don't forget to return the settings back to unity or "normal" after you've finished processing your video, otherwise you'll start finding yourself with a lot of yellow-looking video. Changing the color balance is a very powerful tool in processing video to correct for

---

## We could literally subtract the blue but electronically that's not that easy.

---

many problems. It can also be used to "tint" the image to create effects or to make one scene transition to another. If you've ever had any film transferred to video it probably has a strange color balance that can be corrected using this technique. Although I used the DPS Personal TBC, other tbc's may have the same capability. The DPS software allows me to save my settings to a file so I can build up preset corrections, calling them up later as needed.

### The Other Method for Video Color Correction

Another method for adding the color we need for color correction is to simply use your Amiga, a paint program and a genlock that permits a cross-fade (dissolve) between the genlock's reference video and the Amiga's image.

Using a paint program, change the background color to a yellow (or required color). (Again I stress that you need a vectorscope to really do this right. Otherwise you're going to have to do it visually. So go right out and buy a DPS V-Scope if you're serious about your video) Now remove the menu bars and tools so you have a blank screen. Using the faders on your genlock "mix" the incoming video (the tape you need corrected) with the Amiga's screen until you achieve the balance you need. It won't take much!



**Picture Two:** This example is exaggerated and shows a great deal of blue being present and a large amount of yellow being added to compensate.

Just a little of the Amiga's color is all that's required. This is a sensitive adjustment so don't overdo it. You'd just end up with a yellowish picture instead of a bluish one. Again this technique can be used to create special effects.

Unlike the TBC solution we discussed earlier, this technique allows us to mix in less than a full screen of color correction. If the background color was all yellow except for a black square in the upper corner, then the video would have an area of uncorrected color corresponding to the black area in the Amiga's image. (Black, when added to another color, changes nothing.) If you put together an animation of black shapes then you'd see the animation only as areas of differently tinted video.

In fact forget that color correction was our topic today. Just dwell on the possibilities of using your genlock with the faders positioned somewhere in the middle of their range. Just what could we do? We'll find out next month as we put the new SuperGenSX external genlock through its paces.

But before we sign off, can anyone name the movie from which I pulled the images for this month's column? This is tricky. It only ran in the New York area but is for sale directly on tape. It was co-produced by a famous Amiga animator and that's all the clues you get. The first reader to correctly guess the animator's name and the title of the movie wins a copy of CLUE for his Amiga. See you next month!

Mr. Sands can be reached by EMAIL at [ojsands@portal.cup.com](mailto:ojsands@portal.cup.com) or on Portal as OJSANDS. He is also often available during the live conferences on Portal on Wednesday nights at 9 PM Central time. He can also be contacted via this magazine.

•AC•

**Please Write to:**  
**Oran J. Sands**  
c/o Amazing Computing  
P.O. Box 2140  
Fall River, MA 02722-2140





# Roomers

by The Bandito

[These statements and projections presented in "Roomers" are rumors in the purest sense. The bits of information are gathered by a third-party source from whispers inside the industry. At press time, these rumors remain unconfirmed and are printed for entertainment value only. Accordingly, the staff and associates of Amazing Computing cannot be held responsible for the reports made in this column.]

## In Defense of The Bandito

This month's Roomers was submitted prior to Commodore's announcement of voluntary liquidation. We have published the column without the benefit of an update to demonstrate how accurately the masked troubadour's statements sometimes are. While we rarely agree with everything The Bandito says especially many things in this current column, we feel the Amiga has prospered by having this rapier tongue in our midst.

## Don't Cry For Me, Mi Amiga

The Bandito has always tried to provide you with as many facts as possible about Commodore and its business dealings. This means reporting about Commodore's activities both good and bad. And it means that, while trying to find reasons for optimism, it's important not to ignore the realities of the situation. And the reality is grimmer than it has ever been before for Commodore.

In these times of trouble for Commodore, it's important to remember a few key facts. First of all, even if Commodore should go out of business, that in no way makes your Amiga less functional. You can still go on using your Amiga just as before; Commodore's existence or non-existence has nothing to do with that. There will still

be software available for Amigas. The Amiga will still be a powerful multimedia computer with unrivaled capabilities for its time. In a few years, no doubt, you'll be able to buy a computer, software, and operating system that will match the capabilities of your current Amiga at about the price you paid for the Amiga way back when. But you can smile to yourself, knowing that you were touching the future years before the rest of the world. And that other computers and operating systems will do with brute force what the Amiga did years before with grace, elegance, and style.

So don't let Commodore's business problems detract from your enjoyment and usage of your favorite computer. Save your sorrow for the poor masses that have to wrestle with MS-DOS, Windows, and PC hardware.

## Commodore Circles The Drain

Briefly, The Christmas That Would Save Commodore didn't. Commodore has announced their results for the quarter ending December 1993, and the results are dreadful. Commodore's sales plunged to a mere \$70 million, and they lost over \$8 million in that quarter. As a direct result, Commodore's stock lost most of its value, plummeting as low as 25 cents a share before stabilizing at less than \$1. Therefore, Commodore stock has been delisted from the New York Stock Exchange, and is now being sold over the counter. In light of this alarming news, the Bandito presents the full text of Commodore's press release, along with suitable annotations by the Bandito [placed in italics and in brackets so there will be no confusion over what Commodore said and what I believe].

NEW YORK, N.Y., March 25 — Commodore International Limited (NYSE: CBU) today reported a net loss of \$8.2 million, or \$.25 per share on sales of \$70.1 million for the second fiscal quarter ended December 31, 1993. *[This is very, very bad. Not just that Commodore lost money during the best sales period of the year; but look at the total sales. That translates to a company of about \$200 million in annual sales, which is a far cry from the \$1 billion dollar a year sales volume Commodore enjoyed merely two years ago. And even at this shrunken size, Commodore continues to hemorrhage money.]* This compares with a net loss of \$77.2 million, or \$2.33 per share on sales of \$237.7 million in the year-ago quarter.

For the six months ended December 31, 1993 the net loss was \$17.9 million or \$.54 per share compared with a net loss of \$96.0 million, or \$2.90 per share in the prior year. Sales for the six months were \$152.7 million compared with \$396.3 million in the year-ago period.

Sales in the December quarter were constrained by limited financial resources, which hampered the supply of products. *[Commodore couldn't afford to buy parts to make machines, and their suppliers wouldn't extend them any more credit. A4000's were shipping without hard drives, because Commodore could not get any hard drive maker to supply them with hard drives without paying them in advance, and Commodore just did not have the money.]* Sales of the new Amiga CD32 game machine were adversely impacted by recessionary economic conditions and an extremely weak game market environment in Europe. *[Hmm, other game machines didn't seem to have a*



problem selling in Europe.] However, Amiga 1200 sales strengthened. [Although Commodore flat ran out of them in the US market and didn't have the money to build more until one of their distributors paid for the manufacture of some units.]

The net loss for the fiscal year ended June 30, 1993 which resulted in negative net worth, and the continuing losses for the first and second quarters of the current fiscal year have had a severe adverse effect on the Company. The Company's inadequate financial resources continue to restrict its supply of products which will significantly reduce sales during the quarter ending March 31, 1994. [If you thought that quarter was bad, wait 'til you see the next one.] The Company is attempting to negotiate a restructuring plan with its creditors, including suppliers who have restricted the Company's credit and instituted legal action against the Company, and lenders who have indicated that they may accelerate their loans to the Company. [Nobody trusts Commodore to pay them back, so they can't get the parts they need to build machines, so they can't sell machines to pay back suppliers. The only way out of this vicious feedback loop is more money.] The Company continues to suffer from inadequate liquidity and there can be no assurance that the Company can attract additional financial resources and complete a successful restructuring. [Commodore has asked a lot of people for money, but nobody wants to take the chance. Perhaps there's no faith in the ability of the current management to pay back such a loan.] In the absence of additional resources and a restructuring, the Company may become subject to

reorganization or other liquidation proceedings. [Yes, it's just as bad as it sounds. Commodore is on the verge of going out of business, and there doesn't appear to be any great hope that it will avoid this fate.]

# COMMODORE INTERNATIONAL LIMITED FOOTNOTES TO CONDENSED FINANCIAL STATEMENTS DECEMBER 31, 1993

1. The accompanying summary financial statements have been prepared on the basis of accounting principles applicable to a "going concern," which contemplates continuity of the Company's operations and the realization of its assets and the payment of its liabilities in the ordinary course of business. However, the Company's financial position and operating results raise substantial doubts about the Company's ability to continue as a going concern. The financial statements do not reflect adjustments that would be required should the Company be unable to continue as a going concern. [Yes, this is as bad as it sounds. In other words, the values listed for assets are far higher than they should be in the event of a liquidation. If you have to have a fire sale of inventory, you're only going to get a few cents on the dollar. That means that Commodore is much, much deeper in the hole than is shown on the balance sheet.]

2. Current debt includes \$33 million of senior notes held by two institutional lenders. The Company is in non-compliance with the note agreements and a waiver extended by the lenders expired on January 31, 1994. [Though Commodore was able to convince Prudential to extend their loan terms,

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Condensed Consolidated Balance Sheets  
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	12/3193	12/3192
Cash and Equivalents	14,400	55,200
Accounts Receivable, Net	78,100	231,800
Inventories	52,900	185,100
Other Current Assets	3,200	11,600
Total Current Assets	148,600	483,700
Fixed and Other Assets	65,000	104,600
	213,600	588,300
Current Debt	116,500	90,200
Other Current Liabilities	148,900	225,500
Total Current Liabilities	265,400	315,700
Long-Term Debt and Other	18,700	64,300
Shareholders' Equity (Deficit)	(70,500)	208,300
	\$213,600	\$588,300

### COMMODORE INTERNATIONAL LIMITED AND SUBSIDIARIES

Condensed Consolidated Statement of Operations (Unaudited) (\$000's)

	Three Months Ended December 31,		Six Months Ended December 31,	
	1993	1992	1993	1992
Net Sales	\$70,100	\$237,700	\$152,700	\$396,300
Cost of Sales	64,800	254,400	140,900	387,800
Gross Profit (Loss)	5,300	(16,700)	11,800	8,500
Operating Expenses	9,300	54,900	33,000	94,400
Operating Income (Loss)	(14,000)	(71,600)	(21,200)	(85,900)
Interest Expense	3,700	5,000	7,900	9,400
Interest (Income)	(9,000)	(200)	(9,100)	(500)
Other Expense (Income)	(500)	300	(700)	500
Income (Loss) Before Income Taxes	(8,200)	(76,700)	(19,300)	(95,300)
Provision (Benefit) Income Taxes	—	500	(1,400)	700
Net Income (Loss)	\$ (8,200)	\$ (77,200)	\$ (17,900)	\$ (96,000)
Earnings (Loss) Per Share	\$(.25)	\$(2.33)	\$(.54)	\$(2.90)
Average Shares Outstanding	33,182,000	33,071,000	33,148,000	33,059,000



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*Commodore has once again been unable to meet their deadlines. At some point, Prudential will refuse to throw good money after bad, and will call in its loan. That point may be here soon.]*

3. In order to obtain net working capital, a company controlled by the Chairman loaned \$7.5 million to the Company and advanced an additional \$9.9 million for the acquisition of components for use in the production of the Company's products. The \$7.5 million loan is secured by accounts receivable and inventory, and the \$9.9 million advance has resulted in an additional secured indebtedness to the Chairman's company. *[Irving has loaned some more money to help keep Commodore going. Of course, Irving's no dummy, so he's secured his loan against accounts receivable and inventory. Unlike all the parts suppliers and stockholders, Irving will be sure to get his money back if Commodore collapses.]*

### The Beginning Of The End?

It does look grim for Commodore these days. While the current financial difficulties could be overcome through Herculean effort, there are long-term problems that are well-nigh impossible to fix. Sure, Commodore could make some money selling CD32 and Amigas. Properly run, this might be a profitable \$300 to \$400 million a year business... for a year or two. After that, Commodore would need newer, faster models to compete with the rest of the computer and video game business. And without any R&D staff or R&D budget, Commodore cannot create newer, better computers.

The 680x0 processor line is ending with the 68060, as Motorola focuses the future on the PowerPC chip. Commodore has no staff capable of porting the AmigaOS to any other chip. Even if they somehow acquired the money to fund such an enormous effort, what would they have? An operating system for an advanced processor without a substantial base of business software, except in the niche market of video. Operating system wise, they'd have several competitors, like Windows NT, OS/2, Taligent, Macintosh, UNIX, and others. While these are all bloated and slow compared to AmigaDOS, they would have true multi-threaded multitasking, and thus could compete with AmigaOS on a functional level.

Thus it's very hard to see a future direction for the Amiga operating system, given the financial state Commodore is in. And regardless of the hardware, it's the operating system that gives our favorite

computer most of its character. It looks like 3.0 is as good as we're going to get for AmigaOS.

Meanwhile, the Bandito has heard that Mehdi has been making the rounds of electronics companies looking for someone to buy Commodore, but so far, no sale. Among the companies that have said thanks but no thanks: Thomson, Philips, and Daewoo. Commodore has already been turned away by Sony and Hewlett-Packard.

The A4000T has reportedly been canceled, except for a few hand-built prototypes. This will definitely impact some third-party Amiga vendors, who were looking to this box as a high-end solution. Many are already jumping ship for other platforms, accelerating the process that has been under way for years.

Apparently Commodore has been convincing parts suppliers to send them more parts even though Commodore hasn't paid its bills in a long time, under the theory that "If you don't ship us parts, we can't make product and we'll go out of business and you won't get anything." This worked for many suppliers, but after the recently announced financials showing a loss over the Christmas selling season, this will be a much more difficult sell job in the future.

Where does Commodore go from here? They continue to sell as many Amigas and CD32's as they can ship, though they can't ship enough to meet demand or to generate the capital they need to get out of the hole. Commodore will keep trying to find a new lender or a buyer for the company, but no one knows if they'll be successful in the short time they have before their creditors get too angry to be put off any longer and the company goes into liquidation. Certainly, as a going concern there's money to be made with Commodore's products. The question is, can Commodore convince someone of that? We'll just have to wait and see.

### Reach Out And Touch Someone...

Anyone

If, like many Amiga fans, you have the urge to express your opinions to people who might be able to do something about them, the Bandito provides (as a public service) these addresses. Some hints when writing to the folks at Commodore. Try not to use expletives when you're writing, and stay away from exclamation points. Remember, if your question begins with "Why don't you..." the answer generally is "Money." Finally, please take note of the fact that the



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phrase "brain-dead" is no longer in polite usage. The preferred term these days is "intellectually challenged." Oh, and please, don't use the term "marketing" in your letters; you don't want to make them look up words in their dictionaries.

Mr. Mehdi Ali  
Mr. Irving Gould  
Commodore International Limited  
375 Park Ave..  
New York, NY 10152

Don't write to Geoff Stilley any more; he's left the presidency of Commodore US to go to another company. The Bandito has even heard that Irving Gould and Mehdi Ali may be leaving their posts soon. Whether this is due to pressure from angry stockholders or merely to an enhanced sense of self-preservation is difficult to tell. The Bandito certainly hopes that if they do leave, they don't grab any golden parachutes. Seems unlikely, given Commodore's advanced case of pecuniary strangulation, but you never can tell with the world of high finance. After all, Commodore executives earned astronomical salaries for years even though the company's sales and earnings should have had them jumping out of windows in expiation of their job performance. The Bandito might suggest handing departing executives an A500 power supply instead of a parachute; this would be a fitting reward for services rendered, and a reminder of what Amiga fans have had to deal with.

Since we're looking at the grim possibilities, there's some information we need to know. Commodore US, being a corporation under US laws, can indeed file for bankruptcy if necessary under Chapter 11 laws. However, Commodore International, as a Bahamian corporation, can't file Chapter 11. Things are different in the Bahamas. Incorporating there means certain tax advantages, and safety from the prying eyes of governments, but there is a downside. There's no protections afforded a company in financial trouble, the way US law lets a company try to restructure while protecting the company from its creditors. Under Bahamian law, if a company gets into too much fiscal trouble, it just declares insolvency (or is forced into it involuntarily) and the creditors get to squabble over the pieces. It's not a pretty sight, apparently. Let's hope that it's one we won't have to witness.

#### AAA Goes Off The Road

According to several well-informed sources the Bandito has heard from, the AAA chip set has been canceled. Or, if you prefer, put on hold, but the digital buzz is that AAA would never see the light of day even if Commodore had the money to produce it. Why? Consider this: the chip set was designed in 1989 (back when Commodore still had engineers), and due to a variety of 'missed opportunities' was never implemented in software (by the time Commodore decided they wanted to do that, they had no more software engineers who could do it). Five years later, the AAA is more expensive and less powerful than graphics chips available for PC clones. So if Commodore really wanted to provide advanced graphics capability, they could just buy it off the shelf, and it would be cheaper than manufacturing custom AAA chips. In either case (AAA or off-the-shelf), a great deal of software would have to be rewritten to make these new graphics modes work. Unfortunately, there's no one at Commodore to handle this task (all of the engineers working on AAA are gone), and no money to fund these efforts. So the next-generation Amiga chips sits as a collection of specifications and drawings and some sample silicon, not entirely debugged and tested, silently awaiting its fate.

Oh, while we're on the topic of graphics, were you still wondering about RTG (retargetable graphics) for the Amiga? That was the project to make it so that the Amiga operating system could easily support multiple display boards from different vendors, different resolutions, and even multiple monitors. Wonder no more; that project is dead in the water, too. A casualty of the lack of R&D funding in general at Commodore.

You may well ask just what it is that Commodore's engineering department is working on these days, if all of these once-important projects have become null and void. As far as the Bandito can determine, not much of anything is happening in engineering these days, aside from a little cost-reduction on CD32 components and some bug-fixing with the operating system. Perhaps resume-polishing is consuming more work hours than anything else...

#### NewTek News

While Rome is burning, some companies are still fiddlin' around with new items for the Amiga. NewTek has finally unveiled their Utter Top Secret project, which turns out to be a "tapeless" editing system. The

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Toaster Flyer (hmm, wonder if they'll be getting a letter from the people at Berkeley Software who make the Flying Toasters screen saver for PCs?) uses a proprietary compression scheme to put audio and video onto hard drives, where it can be edited with some rather cool software NewTek has

come up with. Of course, this fully integrates with the Toaster, so it's easy to put in all your ToasterFX, Lightwave animations, titles, and the like.

While the Flyer provides up to D2 quality video input and output, at that quality level you can only store about 6 minutes of video on a 1 gigabyte hard drive. But you can store up to about 20 minutes of video at Betacam quality in 1 gigabyte, which is good enough for most uses. While the Flyer includes extra SCSI interfaces to allow you to have up to 21 drives connected, you have to buy the hard drives separately (and those drives can run into serious money). And the Flyer card itself costs \$3995 (hard drives not included). The Video Toaster Flyer is supposed to be in mass production by July and in the stores by the fall.

While this is a neat thing, it's not quite as revolutionary as the Video Toaster was in 1990. The Macintosh has numerous digital video editing systems (though those are mostly off-line while the Flyer is on-line), though Macintosh systems offer lower video quality and generally much higher prices, they also offer a more widely supported computer. The Flyer's biggest problem is that it plugs into a computer that's in very short supply these days. Serious Flyer users would no doubt want an A4000T, but the odds of those being produced in quantity are very slim at this point. Perhaps NewTek can pay Commodore to have some 4000T's built, the same way Microsphere reportedly paid to get A1200's.

Surprisingly, NewTek announced that they will not be producing the previously announced Screamer rendering box for Lightwave. Perhaps they just didn't get enough interest in it, but that seems like a rather expensive marketing test that they indulged in. Anyway, NewTek plans to release a \$1995 software package that will run on Windows NT systems designed to act as a Lightwave rendering station. Sort of a do-it-yourself Screamer; you can buy your own RISC workstation and run your Lightwave renderings on it. There may also be a rendering package for owners of multiple Amigas without requiring multiple Toasters (could this be a way to take away some of LightRave's business?).

What will happen at NewTek, last of the major Amiga developers that still hasn't moved to another platform, with the current troubles at Commodore? Commodore's financial woes have already had an impact on NewTek's business, as

well as on every other third-party Amiga developer. When Commodore's not shipping Amigas, it makes it a lot harder to sell Toasters, for instance. And if Commodore goes out of business, that means the end of Toaster sales unless NewTek does something to fix that problem.

The two main choices are to buy the Amiga chip set from Commodore (or the right to make Amigas), or to port the Toaster to another platform. Time is running short, though, for either option. Why? Because Commodore's financial disaster is making it difficult to sell Amigas, since professionals don't want to be stuck with an orphaned computer. Even if NewTek promises to support the Amigas sold with Toasters, buyers are still shying away. And while the Toaster was first with the most for the least price, competition on other platforms is starting to get close in price and performance. And apparently users don't mind paying twice as much for a Mac system as for a Toaster system, because they know the Mac will continue to have new software developed for it, and the Mac will still be around.

It seems that NewTek isn't porting the Toaster to the Screamer platform after all, since NewTek isn't even going to be producing the Screamer. So is there a Mac or PC Toaster in the works? Or a deal for the Amiga chips, or even for the rights to manufacture Amigas? The Bandito waits and watches to see what happens. Certainly something as successful as the Video Toaster should have a bright future ahead of it, whatever Commodore's fate, if there's some forethought and planning by NewTek. What might those plans be?

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# The Commodore Break Up Part One

While Commodore Dissolves,  
The Amiga moves on.

On March 25, 1994, Commodore announced significant losses for the past quarter. On March 28, 1994, the New York Stock Exchange halted trading of Commodore stock. On April 29, 1994, Commodore announced the liquidation of its major assets. With these three small incidents, the Amiga market has changed forever. (For a breakdown of Commodore's March 25th announcement, please read the Roomers column on page 51.) Commodore's April 29th announcement stated:

**"COMMODORE  
INTERNATIONAL LIMITED  
TO LIQUIDATE**

New York, N.Y., April 29, 1994 — Commodore International Limited (NYSE:CBU) announced today that its Board of Directors has authorized the transfer of its assets to trustees for the benefit of its creditors and has placed its major subsidiary, Commodore Electronics Limited, into voluntary liquidation. This is the initial phase of an orderly liquidation of both companies, which are incorporated in the Bahamas, by the Bahamas Supreme Court."

While the text of the message was short, the impact was exceptionally large. Within a few hours after the announcements, BBS systems around North America were busy gossiping over the news. Early morning editions of most papers missed the story entirely. NBC's Saturday morning news show, Today, carried a brief comment on the announcement during their news commentary.

On Monday May 2nd, U.S.A. Today carried a brief comment in their Moneyline segment. According to a U.S.A. Today editor, the piece was derived from the initial release seen on the Associated Press. The Wall Street Journal carried a short piece on

Commodore's liquidation, however the article only seemed to be in the newspapers printed for the Philadelphia and Washington, DC areas.

One of the factors that has stopped most reporters from writing a solid unbiased piece on the liquidation is Commodore's lack of information. Nothing is being said officially. In fact, nothing is being said at all. There have been no comments or official announcements from Commodore since the April 29th announcement. Dealers, distributors, reporters, and others have been attempting to contact

Centaur Development is optimistic about the future of the Amiga technology and believes that there are excellent reasons to expect that the Amiga technology will survive the current situation at Commodore.

Because of the huge installed base of OpalVision Main Boards and their current sales strength, the overwhelmingly strong interest in the Video Modules from around the world and the likelihood that the Amiga technology will be marketed with renewed vigor, we see every

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## "The Amiga is important. Commodore is irrelevant."

IAM's president, Dale L. Larson

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members of Commodore International's management to no avail. One result has been the unusual flood of announcements by Amiga developers and vendors who want to reassure their customers that they intend to stay in business and support the Amiga.

### Centaur Development

On May 5, 1994, John Sievers of Centaur issued the following statement:

"Centaur Responds to Commodore Liquidation

Centaur Development, in response to numerous inquiries from Amiga end-users, other Amiga Developers and interested parties, has issued the following statement:

Centaur Development is committed to the completion of the OpalVision product line in spite of the problems which have arisen at Commodore. It is our intention to complete the OpalVision Video Enhancement Modules as previously announced.

reason to bring the new products to market. We are continuing enhancements and upgrades to our current products as well as the development of new products.

The Video Processor Module is currently in production and Centaur will deliver the initial run of Video Processor boards to international dealers and distributors during the first week of June."

### Intangible Assets Manufacturing

In a release on May 4th, IAM made a similar announcement:

"Intangible Assets Manufacturing Continues Strong Support of Amiga Users"

"Intangible Assets Manufacturing, a software development and consulting company in the Amiga marketplace, announces that Commodore Electronics Ltd's voluntary liquidation in no way affects IAM's commitment to the Amiga.

IAM's president, Dale L. Larson stated, "The Amiga is important.



Commodore is irrelevant.' Larson elaborated, "Even if Commodore disappears and no one else picks up production of the Amiga, there is a large existing base of machines which will remain valuable for many years. We intend to help current Amiga users to get the most from those systems. Further, we believe that licensing agreements or other arrangements will likely allow production of new machines by someone."

IAM's currently available products include Amiga Envoy — an Amiga peer-to-peer networking package. IAM expects to make an announcement of a new Amiga book soon, and has other major projects in the works for the coming year."

### Blue Ribbon SoundWorks

The Atlanta, GA software developer, BlueRibbon Soundworks, issued a similar letter to their entire customer base from Blue Ribbon's president, Melissa Jordan Grey: "Dear Amiga Enthusiast,

By now, you may have heard that Commodore Business Machines is

### Computer Basics, Inc.

When asked about Computer Basic's thoughts and expectations for the Amiga and their Amigaman business, Bill Smith stated "No one that has been involved with the Amiga doubts the value of its advanced technology. As Commodore fades into oblivion, as I'm sure it will, the technology will pass to new powers that will implement it in startling ways. It is important that the Amiga community, including users, magazines, developers and all who have vested interest in the computer, make sure that the new owners of the AA and AAA chip set see the viability of keeping the Amiga alive. When we know who they are, we must let them know who we are and that we will support their investment in keeping the Amiga an option in the PC market. By the time we know who holds the technology, their decision to keep or scuttle the Amiga as a computer will have probably already been made. If they do commit resources to the Amiga and I think they will... I'm betting on it... it is imperative that we all support them."

### Creative Equipment International

As mentioned earlier, sales of Amiga products have actually increased during the past few days. The developers we have talked to have no intention of dumping the Amiga for other platforms. Development on new products continue strong. Now that the flurry of bad news is over, the dealers can get back to selling and making money.

As you are aware an injunction against Commodore product being sold by Commodore or imported into the United States is in place. CEI is working with Commodore to reverse this action. Parties who defy the court actions can be charged with Federal Crimes. The injunction does not affect your current inventory or our inventory. We believe there remains plenty of product to meet foreseeable demand.

### Service Management Group

SMG is the company originally contracted in the United States to service the Amiga in repairs and warranties. An SMG spokesperson stated that SMG will still honor warranty

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As Commodore fades into oblivion, as I'm sure it will, the technology will pass to new powers that will implement it in startling ways. It is important that the Amiga community, including users, magazines, developers and all who have vested interest in the computer, make sure that the new owners of the AA and AAA chip set see the viability of keeping the Amiga alive.

Bill Smith, Computer Basics, Inc.

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going out of business. While this certainly spells the end of a corporate entity, it does not in anyway diminish the outstanding technology which has evolved since the Amiga's inception. In fact, Commodore's demise may actually spur additional growth of the Amiga market as new contributors and technology licensees emerge.

We at The Blue Ribbon SoundWorks remain 100% committed to our world-wide Amiga customer base. We fully intend to support you with additional Amiga software and hardware offerings, as evidenced by our recent release of Bars&Pipes Professional v2.5. Indeed, our latest edition of Quarter Notes, which is scheduled for mailing next week, is our biggest newsletter yet!

The Blue Ribbon SoundWorks will continue to set the standards in Amiga music technology and is proud to offer its customers the most powerful, innovative and integrated music solutions on any platform anywhere. Period.

I encourage you to get the most out of your Amiga investment. Our mutual support will ensure a bright future for the Amiga long after Commodore's issues have been resolved."

CEI is a distributor who has created a strong business based on the Amiga (see the Amiga in Business article in the May, 1994 issue of *Amazing Computing*). On May 20, 1994, CEI issued the following statement to its dealers

"As was expected, a number of interested parties have surfaced. Some of these parties are interested only in Commodore's distribution while others are interested in the technology for other applications and others are interested in the Amiga and so on...

CEI is working closely with major partners to insure the continuation and growth of the Amiga. Our sole interest is to have Amiga product available for our dealers. We honestly believe that the likelihood of the Amiga continuing and advancing will be 100%.

The level of rumors is at an all time high. Don't believe everything you hear. As a general rule the dealer base can be congratulated for controlling negative media attention and putting the events of the past few days in a positive light. We are seeing sales of existing products actually increase. The fact is the Amiga remains the best solution for desktop video and multimedia. Upon any significant news CEI will relay the latest accurate information.

claims and make repairs.

### Amiga Suitors

Several companies are rumored to be interested in the Amiga technology. Sony, Samsung, and Philips are just a few that head the list of international heavyweights. However, none of these companies have made official statements to this effect nor will they privately verify their interest in securing the Amiga or its technology.

Early suitors were thwarted when it became apparent that the new owner would be responsible for the colossal debt Commodore had managed to incur. However, after Commodore's upper management placed the company in liquidation (meaning the new owners would be responsible only for their bid and not any outstanding encumbrances), several companies have reportedly made offers for the property.

The leading contender, according to most rumors (and verified through an unofficial source) is Samsung. No Samsung official would either confirm or deny this fact at press time. Samsung's complex structure and heavy consumer electronics influence in the U.S. market would make it a natural choice to continue the Amiga as a computer platform.

To be continued...

•AC•





# Amazing Computing's Reader's Choice Awards Official Entry Ballot

## Vote Today!

Amazing Computing's readers choice award election is open to all readers of AC throughout the world. This is your opportunity to promote the companies and products you believe are providing the most value and service to the Amiga community. This is your means to demonstrate your appreciation for spectacular products offered and superior service rendered.

First, register your ballot by supplying your name, address, and Amiga model number in the space provided. This is necessary to be certain the Amiga community obtains a fair and impartial vote. No duplicate entries please. Photocopies of this ballot are acceptable; however, we must limit votes to one ballot per Amiga user.

Second, list your favorite Amiga programs and Amiga vendors in the space provided with the best being on top and the least on the bottom. You are limited to four entries per category (except CDTV/CD32). Be legible; if we cannot read your entry, we will not be able to count it.

Third, give us your thoughts. At the end of the ballot is a space for your comments, suggestions, concerns, and ideas for the Amiga market. Please take a moment to address the Amiga issues that are important to you.

Fourth, mail your ballot to:  
Vote Amiga '94  
P.O. Box 2140  
Fall River, MA 02722-2140  
Don't delay! In order to be counted, all ballots must be postmarked by August 26, 1994. Don't miss this chance to reward the products and vendors who have supplied you with the tools to do more with your Amiga.

Look for the results of AC's Reader Choice Awards in the December issue of *Amazing Computing* and the Winter '95 edition of AC's *GUIDE to the Commodore Amiga*.

Please complete the following. Your vote cannot be counted if you do not register here.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_ Town and Amiga \_\_\_\_\_  
(please give model number ie A1200)

Please, one vote per Amiga user.

## Software:

Listed below are 18 categories of software. Choose your favorite software package from each category. List up to four (4) packages from each category. If you list more than one (1) product, place them in order of importance with the best on top, second in second place, etc. Each category will be marked separately from the others so be sure to grade your choices separately.

**Completion is not required!** You need not fill in every category or even every line in each category. Please vote in those areas where you have strong commitments. Your vote will be as important as you make it.

### Painting or Drawing

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Animation

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### 3-D

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### CAD (Computer Aided Design)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Desktop Video

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Image Processing

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Desktop Publishing

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Desktop Publishing Accessories (fonts, clip art, etc)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Word Processing

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Text Editors

(commercial or public domain)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Presentation Programs

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Telecommunications

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Business Packages (spread- sheets, database, finance, etc)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Music (MIDI, digitizers, editor/ librarians, etc)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Education

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Authoring Systems

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Utilities (backup, DOS conver- sion, print, miscellaneous)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Language/Programming

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**PLEASE VOTE!** Your interests, concerns, and preferences are important to the entire Amiga community.





# Amazing Computing's Reader's Choice Awards Official Entry Ballot

page 2

## Hardware:

Listed below are 12 categories of hardware. Choose your favorite piece of hardware from each category. List up to four (4) items from each category. (Be sure to list the manufacturer with the product.) If you list more than one (1) product, place them in order of importance with the best on top, second in second place, etc. Each category will be marked separately from the others so be sure to grade your choices separately.

**Completion is not required!** You need not fill in every category or even every line in each category. Please vote in those areas where you have strong commitments. Your vote will be as important as you make it.

### Hard Drive Controllers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Accelerators

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Optical/Tape Drives

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Video Switcher Cards

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Emulators for other Computers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Video Hardware Accessories

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### CD-ROM

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Scanners/Digitizers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Memory Expansion

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Laser Printers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Graphics Cards

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Dot Matrix or Jet Printers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Please Note:** Photocopies of this ballot are acceptable, however only one ballot per person will be counted.

**The Scale:** Place your choices in the appropriate category. Judge a company/and or its product by reliability, customer service, compatibility, upgrade availability, ease of use, features, effectiveness of product, etc. Many products can be placed under more than one category.

## Entertainment:

Because there are so many different types of games on the market, we are unable to list each category separately.

Please list your favorite game(s) and apply the rating system to your choice(s). Also, you are given the opportunity to list your favorite game manufacturers and grade them accordingly.

### Favorite Game(s)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Best Manufacturer(s)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## Service:

This is an opportunity to grade Amiga companies on their service. List up to four (4) companies and grade them on these areas: responsiveness to customer's needs, user registration process, courtesy, tech support, upgrade availability, and availability of assistance (for tech support, questions, orders, etc).

### Best Manufacturer

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Best Technical Support

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## CDTV & CD<sup>32</sup>

Although CDTV/CD32 titles may sometimes be the same as their regular Amiga counterparts, there is also a wide variety of entirely new titles. For the sake of space, we have offered one master category for your favorite CDTV & CD<sup>32</sup> applications. Please list them below with your favorite as number 1 and so on, until you have listed all the titles for which you wish to cast a ballot.

- |          |          |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

## Write In:

No ballot would be complete without a write-in section. We have included this area in case we have missed a section of the Amiga market you feel should be included or you have comments or suggestions that you would like to address to the Amiga developer community. Please make your comments, suggestions, and/or choices below. Your thoughts are important to the entire Amiga industry. Take a moment and express yourself and attach an added sheet if necessary.

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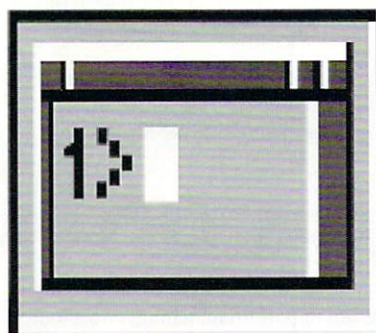
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**PLEASE VOTE!** Your interests, concerns, and preferences are important to the entire Amiga community.





# cli<sup>by</sup> Keith Cameron directory

## AmigaDOS Glossary, Part 4

This is the final article in a series dedicated to defining terms used in relation to the command line, or Shell. Only those terms used frequently in AmigaDOS are included. This is not intended to be a glossary of computer terminology in general. Last time, we finished with the letter 'P', so this month we will pick up with the letter 'R' as there are no terms of relevance beginning with the letter 'Q.'

**RAM** (Random Access Memory) is, in effect, the Amiga's memory (see memory for further discussion). The Amiga, though, also uses RAM to refer to a memory area set aside and used as a disk storage area. You can use the RAM disk as you would any other disk, with the understanding that what is in the RAM disk will be lost when the computer is turned off. One of my first articles concerned how to effectively use this disk area, especially for those people with no hard drive and only one disk drive. The RAM disk can be very effective.

I often refer to **requesters** in my articles. These are little windows that pop up when the computer needs more information. The user must then select one of the options available. For example, when you format a diskette, you will see a requester appear "requesting" information from you, like "Continue" or "Cancel".

A **resident** program can be executed very quickly, for it "resides" in the computer's memory; it does not have to be loaded from disk.

When you purchase your Amiga, it comes equipped with **ROM** (Read Only Memory) that can not be changed. Certain commands and instructions are already set. To change these, you would have to purchase new hardware.

Disks have a **root block** which provide information about the disk. If this block is erased, the disk becomes ineffective. Many viruses, especially the early ones, often resided in the root block of disks.

The **root directory** is the first level of directories on a disk (regardless of whether it is a hard disk or floppy). It is, in effect, the first generation of parents (see parent).

A **script** is a type of program using AmigaDOS commands that instructs the computer to perform a specific function. Most users write script files for complicated or detailed tasks they perform regularly. They then need only to execute that one file.

Although most users think of the Workbench when they see the word **scroll**, you can scroll through other windows by using the arrow keys.

When a command or file is executed, the Amiga follows a **search path** in order to locate that file. For example, the 'c' directory is always searched, as are certain others (depending on the version of Workbench you are using). The search path can be altered by using the PATH command. To execute a file not in the search path, you must type in the complete path to that program (see path).

A **sector** is a unit of storage on a hard drive and is, in most cases, 512 bytes.

Another of the numerous gadgets is the **sizing gadget**. Located in the lower right hand corner of most windows, it allows you to change the size of the window.



A **source file** is one that is being used to provide information (see destination). If you copy a program from one diskette to another, for example, the original is the source while the diskette copied to is the destination.

Sometimes it becomes necessary to increase the **stack size** associated with a program. The stack is the amount of memory allocated to that program. By increasing the stack, you increase the amount of memory the program can use.

A file we have worked with many, many times in my articles is a **script file** called startup-sequence. It is located in the 's' directory, and it instructs the computer how to do certain things as it boots. If you have come to the Amiga from the IBM community, think of the "autoexec.bat" file.

By now, you know that a **subdirectory** is simply a directory which is within another directory. It is the Shell equivalent of a drawer.

My first Amiga was the old 500 with one floppy drive and no hard drive. It also was limited to 512 memory. This resulted in a lot of disk **swapping**, or alternately putting in one floppy diskette and then another. Just making a backup of a diskette resulted in at least six swaps.

Any program that creates or uses data is a **tool**. When assigning icons to programs, be sure to give tool icons to tools.

What **version** of Workbench are you using? Run the version command to find out. The version identifies the software. Of course, newer and newer versions of software are always appearing.

Don't be confused by **volume**. This just refers to a disk, whether floppy or hard. For example, the disk in drive df1 can be referred to as "df1:" or by a name.

To get the most use you can out of pattern matching, you should become familiar with **wildcards**. Wildcards are symbols like the question mark (?) and the number sign (#) that are used to indicate certain patterns. If you are familiar with the use of wildcards in the MSDOS world, you will realize that the asterisk (\*) is the most commonly used wildcard in that system.

A **window** is simply a designated area of the screen where activity occurs. Windows normally have a title bar, scrolling gadgets, sizing gadgets, and other accessories.

When I speak of **Workbench**, I am referring to the Amiga user-friendly graphical interface — in other words, the icon environ-

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## The **root directory** is the first level of directories on a disk (regardless of whether it is a hard disk or floppy). It is, in effect, the first generation of parents (see parent).

---

Every AmigaDOS command has a **syntax** that defines the necessary ingredients of the command. It identifies the necessary keyword as well as any other arguments that are required.

While a program is being executed, that process is referred to as a **task**. Remember multitasking?

**Template** and syntax are really about the same thing. A command's template, though, is specific specifications. To see what I mean, type in a 'c' directory command followed by a space and a question mark. When you do so, that command's template should appear.

Ready for another gadget? How about a **text gadget**? Such a gadget appears when you need to enter some text, like a file name.

Run the list command and you will be provided with a list of files in the current directory. See the dates and times listed? Each one is called a **timestamp** and designates when the file was created or last altered.

The top of your screen or window should have a label indicating its name. If you are in a word processor, for example, the name of the document may be at the top. This name normally appears in the title bar.

I sometimes use Workbench to refer to the software that operates the Amiga. Hopefully, my meaning is clear according to the context in which it is used.

If you **write** to a disk, you save information to that disk.

If you set a disk to **write-enable**, you allow it to be written to. If you **write-protect** that disk, no information can be recorded to that disk. On floppies, you will see a little sliding plastic tab in one corner that can be moved about. When you can see through the tab, the disk is write-protected. When you can not see through the slot, the disk is write-enabled.

The **zoom gadget** in the upper right hand corner of most windows allows you to quickly change the size of the window. However, there are only two sizes available.

This concludes this four-part series on AmigaDOS terminology. Hopefully, some of the terms I use in my articles make more sense to you now. You may want to copy this series and keep it handy to refer to while reading computer magazines and manuals.

Please Write to:  
Keith Cameron  
c/o Amazing Computing  
P.O. Box 2140  
Fall River, MA 02722-2140

•AC•





# Feedback

## Letters to the Editor

### Negative and Positive Comments on AC, Don't Defend Commodore, and More.

Dear AC,

I enjoy reading your magazine every month and I have several likes, dislikes and suggestions that I want to mention regarding its content, as follows:

New Products & Other Neat Stuff - I like the concept, content and format but sometimes it isn't as up-to-date as it should be. I expect to first hear about a product announcement in this column, but sometimes product news is several months old before it appears here. An example; March issue - Deluxe Music - I saw Deluxe Music available in a mail order ad in your December issue! And I'm quite certain that it was released a few months before that.

cli directory - I find this column of little or no use. I see no sense in rehashing information that is already at the Amiga user's

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"I'd like to see "Big Name" ads.  
like Gold-Disk, Softlogik, Softwood  
and a host of other software and  
hardware producers."

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fingertips - in their AmigaDOS manual!! And if the column delves off into "personal anecdote fluff" too long before getting to the point, I lose interest in the article and turn the page. If Keith C was a bit more concise and stuck to showing us handy things we can do with AmigaDOS commands and scripts, beyond command format and descriptions that are already in the manual, it would be a much more useful column.

Roomers - I love reading it!! I think he does a great job letting readers know what's in the rumor mill, and I appreciate his frank and well informed opinions.

ARexx - Very useful. I think it's particularly important that readers see how they can use ARexx to control other software/hardware, and Merrill does a great job at it.

Desktop Publishing - articles by Dan Weiss - another good column (or set of articles, I guess).

Digital Image Special F/X & Sync Tips - Good. I'm hoping these two columns provide readers with many useful tips on creating computer graphics and video with the Amiga. However, I wish that there was a bit more coverage of artistic techniques with paint and draw programs.

PD Update - I like it. The concept, layout, writing and size are perfect! I hope it becomes a monthly feature. Many users have seen the huge lists of "what's out there", but can't tell which ones are the "must-have" freely distributable programs and files, and this column fills the bill. Along with The Fred Fish Collection, AC has the whole PD scene covered.

On Line - Good. This is just the kind of "in's and out's" of telecommunications that novice (and not-so-novice) users need. I'm wondering if the "Files of the Month" shouldn't belong as a section within PD Update though.

CD32 Review, Diversions, Reviews - Good, but I'd like more products reviewed per issue, especially educational, scientific,

business and home productivity software. I realize there is little out there, so you should be reviewing nearly all of them. An article on available tax software should have been in the January or February issue, in time for tax season. I'd also like to see a quick note at the beginning or end of every review stating what versions of Amigas the product is compatible with, what are the system requirements, and in the case of software, whether or not its copy-protected or hard drive installable. I know that these things are often mentioned within the reviews, but I'd rather see them at one consistent spot in every review.

I also like the interviews, one every couple of issues being just right; the articles featuring Amigas used professionally both in "And Furthermore" and in the individual articles (only one individual article per issue, preferably) submitted by the professionals involved; the coverage of consumer shows where the Amiga is featured; and the tutorial sets of articles, like CanDo and Aladdin 4D, but I wish they were a little more generic, such as mentioning how to do equivalent operations using other software of the same genre (if it's not overly obvious, and of course, assuming it can be done using other software).

Another thing I would like to see is "round-up" articles, grouping together, say all word processors, or all 24 bit display cards, or all paint programs, comparing them all together on features, and pointing out each ones strengths and weaknesses. This would be best as a feature of AC's Guide, letting Amazing Computing put more emphasis on "just-straight" reviews.

My final comment is regarding the magazine ads: I'd like to see "Big Name" ads like Gold-Disk, Softlogik, Softwood and a host of other software and hardware producers. Do anything to get more ads!!

I hope that you've enjoyed my opinions and found them useful.

Sincerely,  
Michel Hache  
Saint John, NB, CANADA

Dear Mr. Hache

Thank you. We not only appreciate your response to AC, but we require it (that is why this section is called Feedback). A copy of your letter will be sent to all of our regular columnists as well as many of the reviewers and feature writers who continue to contribute and help AC. I will attempt to respond to each of your comments in sequence.

The announcements in New Products & Other Neat Stuff are placed the same month that we receive them. That means that if a publisher privately announces a release of a product to the mail order houses three months in advance (to get their order and decide on production quantities), but does not release the product (or even send the announcement to the magazine) until the product is shipped, we must wait. If the product appears in a mail order ad, we can respond to it, but by then a lag of several months from the time of the original notice and when it appears in print cannot be avoided. AC maintains one of the shortest lead times in the marketplace (this includes magazines for other platforms) because we input the new announcements we receive in the last few days of publication, which means it is printed and mailed to subscribers within three



weeks of receiving the most current announcement. Our best effort in this area is to get new product announcements from developers earlier, however, most responsible developers also worry about vaporware.

cli directory was created for people who don't read their manuals. It is a way of helping new users get more from their Amiga. This means the column must always walk a narrow line between beginner interests and moderate to advanced user insights. Granted, it is not always on the mark, but I believe we have all benefited from its attempts.

On Interviews, AC has pioneered this effort to get more of everyone into print. This not only gives valuable insight into a product and its creation, but it adds a human factor to computing on the Amiga as we learn that there is more to a computer product than a disk and a manual.

We have published round-up articles in the past and we will continue to do them. However, such articles require a great deal of time and product. Most current Amiga developers want their products back in as little as thirty days and wonder why they don't see a review in print that same afternoon. We are trying to establish longer loan times for products and a more reasonable expectation for reviews.

More "Big Name" ads. I could not agree more. Our advertising sales staff is continually approaching these accounts, but with little result. AC has maintained the same price for advertising for over five years and we remain a very good buy. AC readers continue to be the central core of the Amiga market. They have diverse interests, spend money to support their Amiga, and they remain committed to seeing the Amiga prosper. So why haven't they advertised? Because our readers have not convinced them that this is where they want to see them. Next time you call a developer, remind them that you read AC.

Dear AC:

In your May editorial, you stated, "We cannot move the Amiga further until we answer these [market related] questions." Let me emphasize the **we** in that statement. The Amiga community is just that, a community. We all can contribute to the marketplace, not for the sake of Commodore or over zealous users, but rather for those who have come to appreciate exactly what the Amiga is. More than a computer, it is a tool for creativity, and one that has continually proven itself more adept than our alternatives.

Rather than become frustrated because of rumors and concern for the Amiga's future, we should realize the full potential of what we have. Nothing can be a stronger motivator for future users and technology than this.

Sincerely,

Mr. Laurie Perrin  
Parrsboro, NS, CANADA

Here Here!

Now that the big C rumor is fact (or did it just generate a great many more rumors), we are more important than ever. The future of the Amiga is most definitely in the hands of the user. Whoever picks up the Amiga technology will require all our help. The Amiga is worth it. We can only hope that the new Amiga producer will be as committed to the platform as its users.

Dear AC,

If your questions in the May 1994 editorial, "Much Ado about Everything", are not wholly rhetorical, I would like to answer, perhaps for myself alone, the gist of them.

Anger is very easily induced in people by a gap between what they expect and what finally happens. The Amiga attracted intelligent people, people who could see the potential of the Amiga, and people for whom the gap between their expectations and what CBM delivered finally became far too large.

The other reason that people can get very angry is when a relationship is going sour. When there is no other alternative offered and separation is likely, there is a great tendency to fill the gap with great anger in order to clearly sever the ties. Whether in divorce or the death of a loved one, anger over the inability to have some control allows at least the semblance of control.

In the case of Commodore, the combination of a failure to deliver on the promise the Amiga had, and the likely murder-

suicide of CBM and the Amiga, generate enough stress, in a user community with virtually no simple alternative, to incite near intellectual riot.

Sincerely,

David Schenken  
St. Louis, MO

PS. It's "attribute to Commodore" not "contribute to Commodore". Act 1 Scene 3 line 5.

PPS. Why do you defend CBM? The virtuous need no defense; the immoral benefit not.

PPPS. re John Dilulu's comments: "But it is understandable." If you mean that others have vented frustrations in similar outbursts, then probably. However, if a similarly placed executive in any other company was purported to have made such a comment, he would either run a full page apology in NewsWeek or be fired. Apparently, John Dilulu was promoted. That outcome is not understandable.

Being Balanced

Thank you for the correction It is always our responsibility to provide the entire story (no matter how many sides). Sometimes, to do this when everyone is crying for blood, we feel a responsibility to offer more explanation to the unpopular areas for "Balance." No story is ever as black and white as it appears and Commodore was no exception.

Although Mr. Dilulu was not promoted but left holding the sagging weights of Commodore U.S.A. (a position he has also left for greener pastures), we were not attempting to defend him, but to provide some understanding as to why he said what he did. The Dilulu comments were placed on the networks and broadcast to all concerned. Journalist either attempt to check direct quotes with the speaker or provide some type of corroborative evidence. The networks took a statement out of context and right or wrong allowed it to become the central frustration of the entire Amiga community. Only afterward was Mr. Dilulu offered an opportunity to clarify his statement. With the electronic age, the rules have changed. Let's hope we all can live up to them.

Dear Editor:

While browsing through the computer book section of my local bookstore the other day, I came across the following definition in *The Illustrated Computer Dictionary for Dummies* by Dan Gooken, Wally Wang and Chris Van Buren:

"Amiga:

**MEANING:** The name of the most technological (sic) advanced, inexpensive personal computer on the market today that hardly anyone cares about.

**SENTENCE:** 'I wanted to buy an Amiga for its low price and great color graphics, but everyone else seems to be using IBMs or Macintoshes. So to remain compatible with the rest of the world, I spent three times as much on a Macintosh and got only half the graphics capability of an Amiga.'"

Is this supposed to make me laugh or cry?

Sincerely,

Steve Folberg  
Austin, TX

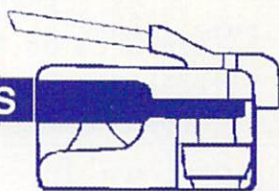
Send letters to Feedback  
c/o Amazing  
Computing  
P.O. Box 2140  
Fall River, MA 02722



# on line

by Rob Hays

## amiga telecommunications



### Traveling in The Byte Information eXchange (BIX) & AlertPatch 3.0 translates Guru grumbles.

Recent announcements of new on-line services from major magazine publishers may lead you to believe that this is a recent trend. Actually, one of the first such services has been around for many years, and this month we will nose around the Amiga section of BIX.

The Byte Information eXchange was begun by Byte magazine as a technically oriented BBS. The idea was to furnish a place where developers and programmers could congregate to help each other over those inevitable hurdles. While it may have begun as sort of a nerd heaven, BIX has mellowed a bit over the years, and broadened its appeal to non-professional users. However, BIX makes no bones about not being geared toward the novice user. The system's learning curve is somewhat steeper than CompuServe's or Genie's. Although help screens are available for most options, it will probably be some time before you will want to consider using the Command Mode and abandoning the menus.

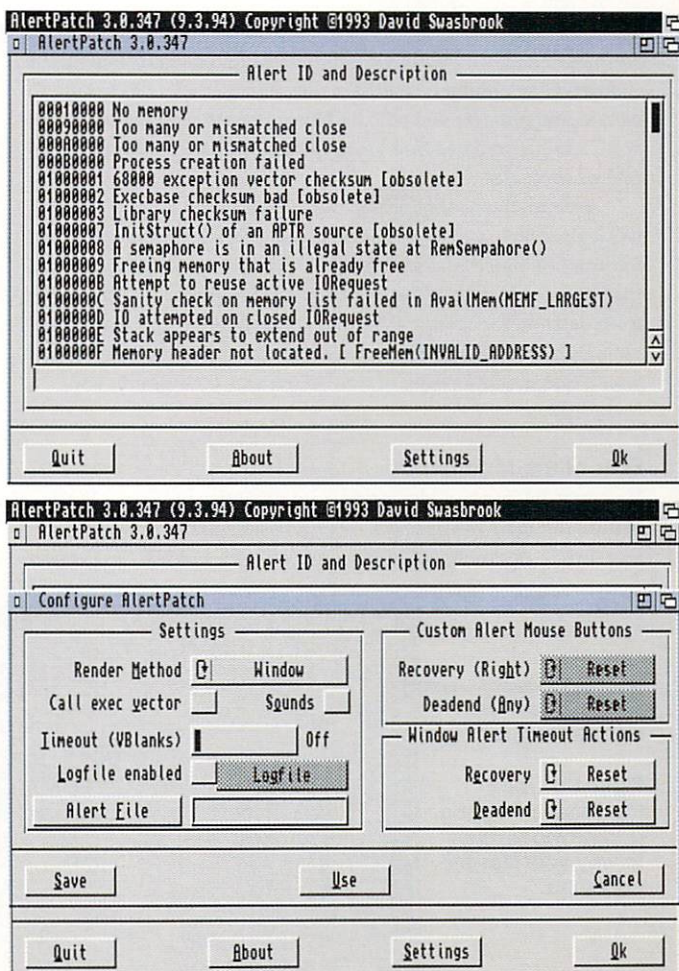
The Amiga Exchange contains sections ranging from old information from the Amiga's earliest days, to closed-to-the-public sections devoted to the hardware and software developers of today. Naming follows a Unix-style convention, with all conferences beginning with "amiga." In addition to the conferences mentioned earlier, there are sections for users to exchange ideas, programming and developer issues, hardware, arts, Unix, and games. There is also a Commodore conference run for developers, and a section for vendors to support their products. Reading through the messages will reveal many familiar names of people long associated with the Amiga.

BIX places all file transfer activities in one area, which is subdivided and organized alphabetically by type. For instance, to search for games files, you choose menu item 3, Listings, from the Main Menu. Choose item 1 to pick your Area, then type Amiga.Games. You can also type a question mark here to obtain a listing of file areas. Follow the same procedure to select a sub area, search for specific file names, then select Receive to tell BIX to send the file to your computer.

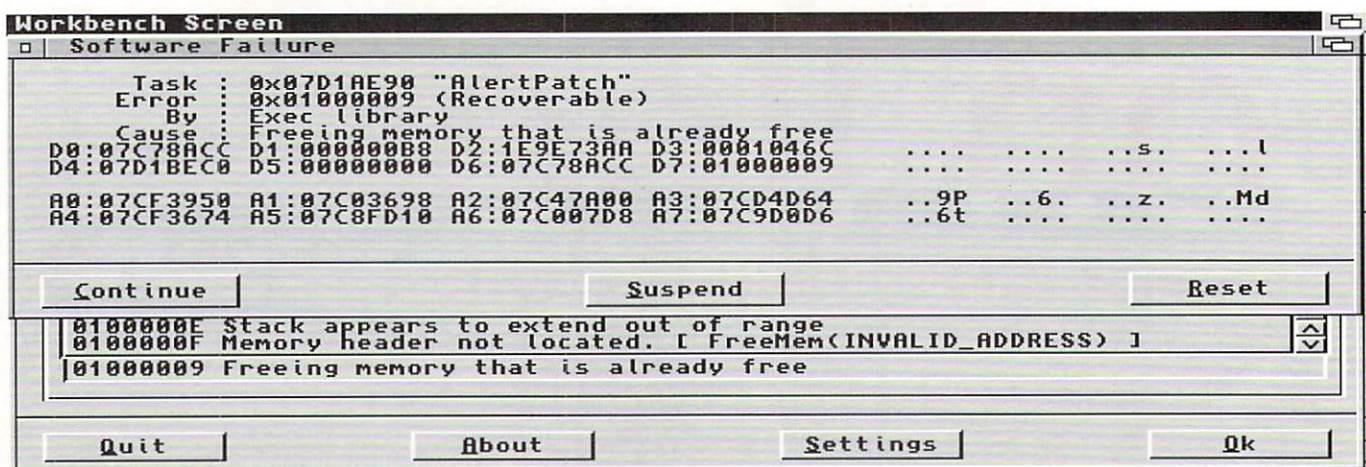
**AlertPatch defines your Amiga's most cryptic communications—Guru errors and Software Failures.**

As with Delphi, which we visited last month, BIX also provides connection to the Internet. Although not as comprehensive, BIX offers basic functions such as telnet, and ftp, and more are planned. Also like Delphi, BIX has a special price for those curious about the service; the first five hours for \$5.

To take advantage of this, set your modem and communication program to 8-N-1 and full duplex. Dial 1-800-695-4882, and press return a few times until you see the Login: prompt, where







you type bix. At the Name? prompt, enter bix.net. Note that the special is good for the calendar month in which you sign up. After the introductory period, fees are \$13 a month plus connect charges. These are generally \$3 per hour via phone line, or \$20 per month which includes the first 20 hours of usage, with additional hours priced at \$1.80. If you use telnet to connect through an Internet account, connect charges for BIX are \$1 per hour anytime.

BIX certainly is not for everyone, but if you are a developer, or serious power user, you definitely should be part of the Amiga Exchange on BIX.

## Update

No sooner had last month's column on Delphi been turned in, then changes were announced. First, a new SIG manager has been named, the same person who had been maintaining the database area. This has allowed him to straighten out the lingering problems caused by neglect.

Second, the restrictions on personal files left in your Delphi workspace have been eased, which should make managing information much easier. There is now no limit to the number of e-mail messages or data files left on-line, and temporary files are safe from deletion for at least 48 hours. This change means that after a long night of cruising through cyberspace on the Internet, you can wait a reasonable amount of time to transfer your files to your home system.

## Files of the Month

If you are having trouble figuring out what those Guru or Software Failure numbers mean, check out AlertPatch 3.0 from David Swasbrook. Not only will it provide you with English descriptions

of the Alerts, it offers several different ways to deal with them when they happen. The archive contains everything needed, including AmigaGuide format docs. A \$10 shareware fee is requested. At 2400 bps the 50K file takes approximately 4 minutes to download. On CompuServe this file is named ALERT.LHA and is in the AmigaTech section.

If you can't figure out why a program can't find all of the files it needs when it starts, a utility named DosTrace can help. This program from Peter Stuer is intended to replace the program SnoopDos. It opens a window and proceeds to list all of the files, resources, etc., as they are requested and allocated. When a program can't find something it needs, right away you can see what it was looking for and where it expected to find it. Documentation is in both ASCII and AmigaGuide formats, and version 2.13 is freeware. The file DTRACE.LHA can also be found in the AmigaTech section. At 2400 bps the 23,882 bytes downloads in about 2 minutes.

Remember, I can be reached as:

R.Hays5 on GEnie  
 RHAYS on Delphi  
 72764,2066 on CompuServe

For U.S. Mail:

Rob Hays  
 P.O. Box 194  
 Bloomington, IN 47402

Please include a SASE if you need a personal reply.

That's all for now. Next month we will take a peek behind the Portal at the Amiga Zone. See you on-line!

•AC•

Above: AlertPatch offers help in a crisis.

Right: DosTrace tracks your file usage and provides clues to why your files are not found.





## JULY 1994 65



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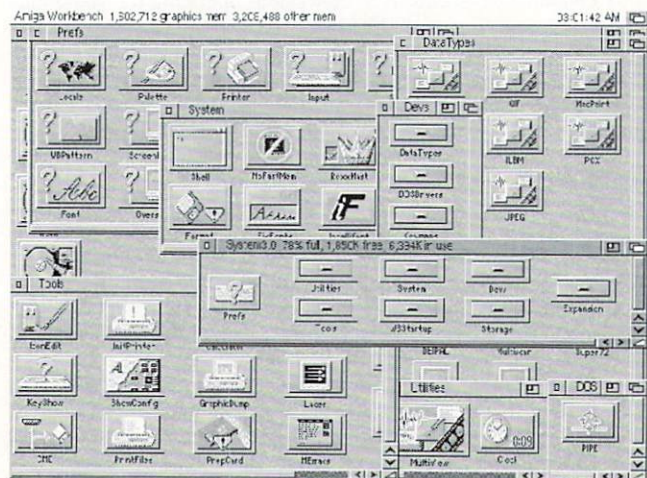
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include multiple open files, macro recording/playback, full customization, autosaving, file statistics, 340 ARexx commands, file position markers, an ASCII table, 2.x/3.x compliance, and many more.

The only obvious thing missing from GoldED's repertoire is the ability to mark parts of lines. Currently, marking is limited to whole lines, but the author promises this will change. Nevertheless, GoldED is still an exceptional product.



MagicWB gives your Workbench a whole new personality.

## MagicWB 1.2p (shareware, \$20; 2.04+)

by Martin Huttenloher

Aminet: /util/wb/MagicWB12p.lha

Not just another ho-hum collection of icons, MagicWB gives your Workbench a whole new personality. Basically, it replaces all the dull standard system icons (including disk and default icons) in the SYS: partition with beautiful 8-color ones in a style the author calls "XEN". These XEN icons have a wonderful 3-D plastic quality, and antialiasing plus color gradients make them look especially smooth. In addition, you can choose from 35 patterns to use on the Workbench screen and in Workbench and directory windows. And there are three new specially designed fonts to complete your Workbench transformation.

An included script makes the otherwise tedious installation process very simple. It even preserves old icon attributes such as ToolTypes and window sizes and locations. The script also detects Workbench 2.x and 3.x, responding appropriately.

After installing the package, I was quite impressed at how much more attractive and professional Workbench becomes. Definitely check out MagicWB.

## TitleClock 3.3 (2.04+)

by Anders Hammarquist

Aminet: /os20/cdity/TitleClock3.1.lha

TitleClock is one of those handy little system enhancements that you can't imagine going without once you start using it. Unlike any other clock program I've seen, TitleClock actually puts its text display in a screen's titlebar - the right hand side. This is very useful if you want it to run from the WBStartup drawer, as it won't interfere with screenmode changes during bootup like window-based clocks tend to do. Besides the Workbench screen, any other screens with titlebars can have clocks too.

Another unique feature is the use of the locale.library's extensive time and date formatting strings under AmigaDOS 2.1+. 2.04 users will have far fewer formatting options. To keep TitleClock small, all configuration is done through Tool Types or command line parameters. Moreover, the program consumes little CPU time.

## Viewtek 2.1 (2.04+)

by Thomas Krehbiel

Aminet: /gfx/show/ViewTEK21.lha

Created by the author of ImageFX, Viewtek is perhaps the most popular Amiga picture and animation viewer. Considering this program's outstanding versatility, it's not hard to see why.

By itself, Viewtek can display ILBMs, ANIMs (op5,7,8), GIFs (87a,89a), and JPEGs. Under AmigaDOS 3.x, it can also display any picture formats for which there are data types. If a picture has more colors than your Amiga can handle, Viewtek renders it nicely in HAM. For example, 8-bit pictures appear in HAM6 on an ECS machine, and 24-bit pictures appear in HAM8 on AGA. For viewing, you can use the Workbench screenmode or any other one. Besides a version for the native Amiga display, the package includes special Viewtek versions for various 24-bit boards (DCTV, EGS, FireCracker 24, Picasso II, Opalvision, Retina, and ImpactVision 24).

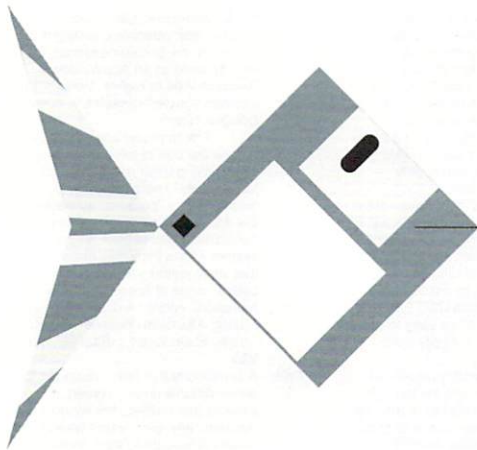
As for ANIMs, Viewtek will play them from disk or RAM. Although there are options for playing at up to 60fps, the maximum achievable frame rate is limited by your Amiga's speed and ANIM depth/resolution. Pressing the cursor keys lets you pause the animation or single-step through the frames. Unfortunately, Viewtek won't play ANIMs on any of the 24-bit boards.

Viewtek is so comprehensive that many users may not need any other viewers, except perhaps MultiView. Just two complaints come to mind: slow JPEG viewing and no MPEG/FLI/FLC support.

•AC•

Please Write to:  
Henning Vahlenkamp  
c/o Amazing Computing  
P.O. Box 2140  
Fall River, MA 02722-2140





# THE Fred Fish Collection

Below is a listing of the latest additions to the Fred Fish Collection. This expanding library of freely redistributable software is the work of Amiga pioneer and award winning software anthologist, Fred Fish. For a complete list of all AC, AMICUS, and Fred Fish Disks, cataloged and cross-referenced for your convenience, please consult the current *AC's Guide To The Commodore Amiga* available at your local Amazing Dealer.

## Fred Fish Disk 976

**Replex** REPLace EXecutable. This handy patch substitutes program names that are about to be executed, e.g. if an icon default tool specifies "c:/MuchMore" and you prefer to use "c:/TextRead", you can have it defined as such. You won't have to change the icon. This version also has a "catch" option to automatically ask for a substitute if a tool wasn't found. Replex has a font sensitive intuition interface, a snapshot option and an unlimited number of definitions, but requires AmigaDOS v2.04 or later. This is version 2.0, an update to version 1.0 on disk number 791. Binary only, shareware. Author: ASWare, by Ekke Verheul

**UChess** A powerful version of the program GnuChess version 4 for the Amiga. Plays a very strong game of chess. Code has been rewritten and data structures reorganized for optimal efficiency on 32 bit 68020 and better Amiga systems. Fully multitasking, automatically detects and supports 640X480X256 color AGA mode machines, and does not at any time BUSY wait. Requires a 68020/030/040 based Amiga computer system with AmigaOS 2.04 or later and 4 Meg of ram minimum. Special "L" version optimized for 68040 and requires 10 Meg of ram minimum. Supports a variety of standard features such as load, save, edit board, autoplay, swap sides, force move, undo, time limits, hints, show thinking, and a supervisor mode that will allow two humans to play with the computer acting as a "supervisor". Version 2.78, includes source. This version supports third party graphics cards. This is part 1 of a 2 part distribution. Part 1 contains the executables and documentation, part 2 contains the source and can be found on disk 977. Author: FSF, Amiga Port by Roger Uzun

## Fred Fish Disk 977

**Forth** An update to the MVP-Forth directory on AmigaLibDisk #9. Provided is an improved, faster screen editor which uses the keyboard cursor keys, backspace and delete keys and

function keys which allow fast moving thru the screens, pasting from PAD and the printing of screen, triad or PAD to the printer port prt. F1 is the OOPs key. Control Keys give fast editing. The control keys and Function keys can be reprogrammed by the user if desired. Runs on Amiga 1000 and 3000. Probably on Amiga 500 and 2000 (Untested). Author: Fantasia Systems, Inc. Updated by John Bos

**KingCON** A console-handler that optionally replaces the standard 'CON:' and 'RAW:' devices. It is 100% compatible, but adds some VERY useful features, such as: Filename-completion (TAB-expansion); A review-buffer; Intuition menus; Jump scroll (FAAST output!); Cursor-positioning using the mouse; MC68020-optimized version; And more... Version 1.1, requires OS2.x, binary only. Author: David Larsson

**LibraryGuide** An AmigaGuide file that lists about 210 different PD, Shareware and Commercial "libraries" often found in the LIBS: directory and a simple description of their purpose, version info, where to get them, etc. May help you determine whether or not you actually "need" some of these spaceconsuming things. Version 1.1, an update to version 1.0 on disk number 942. Author: Dan Elgaard

## Fred Fish Disk 978

**MakeCat** Makes creating locale catalog files easy. It makes catalog files from ASCII files that contain the strings and ID numbers that should be included in the catalog. Reverse operation is also possible with

UnMakeCat, so that existing catalogs can easily be translated or changed. Includes example of how to use locale.library to read catalogs. Version 38.02, requires

AmigaDOS2.1 or later. Binary only, freeware. Author: Camiel Rouweler

**Man** A simple MAN command, known from UNIX systems. The advantage is, that it recognizes .guide files to be AmigaGuide documents. MAN then uses a different viewer in order to display the AmigaGuide document. Furthermore MAN recognizes TeX-DVI files as well, using a different viewer to display them. You may configure MAN using environment variables. Version 1.11a, public domain, includes source. Author: Kai Iske

**MiserPrint** A print utility that puts up to 8 normal pages of text on one sheet of paper. You are able to save paper and time. MiserPrint uses the small built-in fonts (Courier and Letter Gothic) of the HP-Deskjet printers. Version 1.11, an update to version 1.0 on disk number 928. Requires Kickstart 2.04 or higher, binary only, giftware. Author: Heinz-Guenter Boettger

**MouseClock** A hardware/software project of a low cost, very small external battery backed up clock calendar for all Amigas (especially for A1200, A500, A600). It is connected to the mouse port #2. Version 1.22, shareware, includes source. Author: Adriano De Minicis

**NewEdit** A commodity, that patches all string gadgets of the system (better: it installs a global edithook for the string gadgets). Beside some new edit functions, NewEdit supports copy and paste of text between the clipboard and string gadgets. Version 1.8, includes source. Author: Uwe Roehm, based on work by Oliver Wagner

**RachelValley** A 256 colour and 16 colour IFF picture of "Rachel Raccoon" resting after a hike. These pictures are suitable as Workbench backdrops with the right software. Author: Les Dietz

## Fred Fish Disk 979

**KeysPlease** Displays a nice rendition of the Amiga keyboard and allows you to either click on a key-gadget or press a key to find that key's rawcode or ascii value. Codes are displayed in both decimal and hexadecimal. Version 1.3, binary only. Author: Brian Koetting

**MouseAideDEMO** A DEMO version of a "Mouse" utility which has all the standard functions: Acceleration with threshold, window and screen cycling by mouse and keyboard, mouse and screen blanking, mouse and Auto-Activation, user "hot key" command, Keyboard "String" macros, etc. But also has

many functions other "Mouse" programs do NOT, such as: Shell-Cycling, Key Clicking, Mouse Port switching KeyClosing, Multi-IconSelect with Mouse, Middle Mouse Button Windowing, EZ-Date generation, Workbench to the front function, Ez-Dragging and Sizing, Key zipping, Freezing Mouse and Keyboard of all input, etc. Now features an easy to use Pop-Up 2.xx style intuition interface (that functions in 1.3) and the ability to function correctly in all the new screen modes! Written in assembly for efficiency in size and CPU usage. Version v9.81a, an update to version v9.69a on disk 892. Binary only. Author: Thomas J. Czarniecki

**QMouse** An unusually small and feature-packed "mouse utility". Was inspired by, but not derived from, the original QMouse by Lyman Epp. Features include automatic window activation (like WinX), top-line blanking for A3000/A2320 users, system friendly mouse blanking, mouse acceleration and/or threshold, "Pop-CL", click-to-front/back, "SunMouse", "NoClick", "WildStar", Northgate key remapping, and more. Requires Kickstart 2.0, but is not a commodity. Only 3K. Version 2.90, an update to version 2.30 on disk 802. Public domain, assembly source included. Author: Dan Babcock

**SnoopLibs** A clever tool for developers and others with a more-than-usual interest in the functioning of tasks, to patch and monitor any library-function-call from a certain task. The output-formats can be changed and the results can be printed to a window, a file or printer. Only for Kickstart v37(+). Includes six ".sl" files (library data) and a tool (ld2sl + source) to add more. Comes with an AmigaGuide manual. This is version 0.9, first public release. Author: ASWare, by Ekke Verheul & Dirk Reisig

**StartWindow** Configurable WorkBench "launch-program" type utility. Opens a zipwindow that when activated, presents the user with a listwindow of pre-configured commands. Ideal for those commands used infrequently enough that you don't want a dock-icon cluttering up your WorkBench for. Includes source for both English and German versions. Author: Heinz Reinert

**SuperDuper** An exciting, high-speed disk copier and formatter. Typical timings are 99s for a disk-to-disk verified copy, or 38s for a four disk non-verified format. Also available are buffering in RAM, on a hard disk image file or on any sectorbased Amiga device, like RAD., VDO., FMS., etc. Real-time compression using the Xpk standard allows to copy



- in one pass most disks on 1M Amigas, especially in conjunction with a special utility which "hides" external drives to the system (but not to SuperDuper). Bells and whistles include high density floppy support, voice, automatic data increment, a list of the disks copied, and automatic start of operations based on disk insertion/ejection sensing. Works on any Amiga under 2.0 and beyond. The changes from version 3.0 are mainly bug fixes and some new features, namely optional simple refresh windows, the new NoStartup switch, automatic source disk reads, and better window management. Version 3.1, an update to version 3.0 on disk number 903. Binary only, freeware. Author: Sebastiano Vigna
- Fred Fish Disk 980**  
**APIPE** The 'APIPE-Handler' allows you to add the 'APIPE' DOS device to your system. This device acts as a pipe between two programs, but in a different manner than the standard 'PIPE' device does. This handler interprets the text after the 'APIPE:' prefix as a command line to execute, and the process/command which opens the file indicated by the mention of 'APIPE:' can now read the standard output or write the standard input of the program indicated by the command line depending on whether the 'APIPE:' file was opened for reading or writing, respectively. Thus, the opening an 'APIPE:' file is analogous to the UNIX 'open()' call, but it is more widely available to the user. Complete source is included and can be used as an example of a handler. Version 37.5, an update to version 37.4 on disk number 783. Author: Per Bojsen
- HWGRCS** A 3 part distribution of an RCS 5.6.0.1 port to the Amiga, currently at patch level 8. Part 1 contains the binaries and documentation in AmigaGuide and "man" format, part 2 contains the source code to RCS, and part 3 contains the source code and binaries for patch and diffutils. The Revision Control System (RCS) manages multiple revisions of text files. RCS automates the storing, retrieval, logging, identification, and merging of revisions. RCS is useful for text that is revised frequently, for example: programs, documentation, graphics, papers, form letters, etc. Included are RCS 5.6, GNU diffutils 2.6 and an LP utility to support paged diff outputs. Part 1 on disk 980, part 2 is on disk 981, and part 3 is on disk 982. Author: Walter Tichy, Paul Eggert, Heinz Wrobel
- Fred Fish Disk 981**  
**BootUte** A utility to enable more older software work on the Amiga 1200 and 4000 series. It is also useful for users with accelerators. Requires kickstart 2 or above. Binary only. Author: Paul Toyne
- CloudsAGA** This program creates random clouds which you might use in your paint program, as a texture in a ray tracing program or as a background for your workbench. Uses all AGA resolutions. Now requires Workbench 2.0 or higher. This is version 1.05, a complete rewrite in OBERON-2. Removed more Enforcer hits. Public domain, includes source in OBERON-2. Author: Daniel Amor
- ConPaste** ConPaste is a 2.0 commodity that allows you to paste clipped text into anything. Paste into string gadgets. Paste into any text application. In this new version, ConPaste drops its priority by 1 when pasting text to allow sufficient processor time for the receiving task or window to process the text. When you press a user-defined key or key combination, ConPaste will take any FTXT found in clipboard unit 0, convert the text back into input events, and send the input events into the input stream. The output will go to the active window or string gadget.
- This is version 37.25, an update to the version distributed with ClipWindow by Jim Harvey, on disk 935. Author: Carolyn Scheppner
- HuntWindows** Starting with 2.0 you can make screens bigger than the visual size of your monitor. On a double-size workbench, catching windows like requesters etc. can be quite annoying at times. This little utility hangs itself on the VBI (Vertical Blank Interrupt) to find out which window is being activated and moves the screen to show the window in full view. Version 3.3, an update to version 1.4 on disk number 774. Includes source in assembler. Author: Jörg Bublath
- HWGRCS** A 3 part distribution of an RCS 5.6.0.1 port to the Amiga, currently at patch level 8. Part 1 contains the binaries and documentation in AmigaGuide and "man" format, part 2 contains the source code to RCS, and part 3 contains the source code and binaries for patch and diffutils. The Revision Control System (RCS) manages multiple revisions of text files. RCS automates the storing, retrieval, logging, identification, and merging of revisions. RCS is useful for text that is revised frequently, for example: programs, documentation, graphics, papers, form letters, etc. Included are RCS 5.6, GNU diffutils 2.6 and an LP utility to support paged diff outputs. Part 1 on disk 980, part 2 is on disk 981, and part 3 is on disk 982. Author: Walter Tichy, Paul Eggert, Heinz Wrobel
- Fred Fish Disk 982**  
**Bin2Hunk** Convert any binary file to an AmigaDOS hunk (or object file) that can be linked with your linker into your program. This is most useful when you wish some form of data to be a part of your executable. This data can be sound samples, images, text, or whatever. Sports a ReadArgs() CLI interface, as well as a GadTools Intuition interface. Memory type options include ANY, CHIP, and FAST. Allows naming of your hunks. An optional data item containing the size of your data can also be specified. Version 2.2, binary only. Author: Brian Koetting
- HWGRCS** A 3 part distribution of an RCS 5.6.0.1 port to the Amiga, currently at patch level 8. Part 1 contains the binaries and documentation in AmigaGuide and "man" format, part 2 contains the source code to RCS, and part 3 contains the source code and binaries for patch and diffutils. The Revision Control System (RCS) manages multiple revisions of text files. RCS automates the storing, retrieval, logging, identification, and merging of revisions. RCS is useful for text that is revised frequently, for example: programs, documentation, graphics, papers, form letters, etc. Included are RCS 5.6, GNU diffutils 2.6 and an LP utility to support paged diff outputs. Part 1 on disk 980, part 2 is on disk 981, and part 3 is on disk 982. Author: Walter Tichy, Paul Eggert, Heinz Wrobel
- JoyRide** A commodity that provides an intuition front-end for joystick events. This has some nice advantages for both users and programmers. Basic features are a simple joystick interface, application shareable joystick events, and joystick events now pass through the input device stream. Version 1.0, includes source to example test program. Author: Brian Koetting
- Fred Fish Disk 983**  
**CapsLockExt** A Commodity that extends the effect of the CapsLock key to every key on the keyboard, and allows the Shift key to temporarily cancel the CapsLock key. This causes CapsLock to act like a SHIFT-lock key on a typewriter. Requires OS 2.04 or higher. Version 1.0, includes source in assembly. Author: Douglas Nelson
- FastJPEG** FastJPEG is a fast JPEG picture viewer. Besides being fast, it has many other advantages. An important goal was to not trade quality for speed. In fact, FastJPEG is both fast and has an excellent quality. Most other JPEG viewers either produce ugly pictures, or need ages to perform the conversion to HAM mode. Version 1.10, binary only. Author: Christoph Feck
- Harridan** A "Reminder" type program for your startup-sequence. Each time you boot, Harridan will check your event list, if an event is 'due', Harridan opens a window to remind you. If nothing is 'due', you're not bothered. Designed under Amiga DOS 2.04 and takes advantage of all its easy to use features. Version 1.0, binary only. Author: Andy Maxey
- TitleClock** A little commodity (about 4k) that throws up a clock in the top right corner of a screen's titlebar. It may be set up to display itself on one or more screens without running multiple copies of the program. It may also be set to follow your default public screen and also to always display on the frontmost screen. Version 3.3, an update to version 2.7 on disk number 949. Freeware, includes source. Author: Anders Hammarquist
- Viewtek** A feature packed Picture/Animation Viewer. Shows most ILBM's (including 24-bit ILBM's), most Compuserve GIF format images, most JFIF format JPEG images and most ANIM Op-5 format animations, with support for different palettes for each frame. Supports SHAM, CTBL, and PCHG images, full support of ECS/AGA display modes (ie. show 256 color GIF's directly, show 800x600 HAM animations, etc.). Supports viewing contents of clipboard. Iconsifies to a Workbench Applcon. Includes versions for DCTV, EGS, IV-24, Retina, Firecracker, OpalVision, and Picasso. Requires AmigaDOS 2.04 or later. Version 2.1, an update to version 1.05 on disk 903, binary only. Author: Thomas Krehbiel
- Yass** Yet Another Screen Selector, a commodity with several nice features such as: Completely controllable via keyboard (of course you can use your mouse, if you really want to); Shows Screens and Windows (option); Shows PublicScreenname or ScreenTitle (option); Ability to change the default Public screen; Opens window even on non-public screens (option); Font-sensitive; Resizable window. Version 2.0, an update to version 1.1 on disk number 946. Binary only. Author: Albert Schweizer
- Fred Fish Disk 984**  
**AGIndex** Creates an index for AmigaGuide documents. Indices are sorted alphabetically and can be accessed (in AmigaGuide) by pressing the 'Index' button. Index entries can be extracted from the source document using two different selecting methods: by reference or by declaration. Version 1.04, OS2.0 and higher, binary only, freeware. Author: Camiel Rouweler
- Forcelcon** A utility mainly for users of CD-ROM drives. Since one can not snapshot the position of a volume's icon, nor replace it by a user-defined one, this utility was written. Forcelcon allows you to set the position of a disk's icon and/or replace it by a different image/icon which doesn't have to be a disk.info file. All types of ".info" files may be selected. GiftWare, Version 1.4, includes source. Author: Kai Iske
- IconToClip** A link between the Workbench and the Shell. It adds an item to the Tools menu that, when selected, puts the name of any highlighted icon into the Clipboard, from which it can be pasted to the Shell or any other program that uses the Amiga Clipboard. Has an option for writing the full pathname. Can handle multiple icon selections, writing the names in row or column format. Can also be used as an AppWindow. Requires 2.04 or higher. Version 1.0, includes source in assembly. Author: Douglas Nelson
- Imploder** The Imploder allows you to reduce the size of executable files while having them retain their full functionality. There are other "crunchers" or "packers" available for the Amiga, but none are as mindful of the complexities of your Amiga system as the Imploder. In addition to this, its algorithms are more efficient, both in terms of speed, and size reduction. Version 4.0, binary only. Author: Albert-Jan Brouwer, Peter Struijk, Erwin Zwart, Paul van der Valk
- TWA** A commodity that remembers the last active window on any screen. If screens are shuffled, the window is automatically re-activated when that screen is brought to front. Version 1.4, an update to version 1.2 on disk number 874. This version fixes a problem which made it impossible to autoscroll on a screen which is partially in the background. Binary only. Author: Matthias Scheler
- WindowDaemon** Gives extended control to intuition windows and screens through HotKeys and Arexx. Features: Commodities Support; HotKey and Arexx support to manipulate the currently active window and screen. Standard window controls are available such as Zip, Close, Size, ToFront, ToBack, NextScreen, etc. Able to close the parent window of a drawer when opened on "Workbench" if CONTROL is held down. (Only available under kickstart V39 or higher); Specialized options to forcefully close windows and screens, and also to remove tasks that own the active window. Version 1.6, binary only. Author: David Swasbrook
- Fred Fish Disk 985**  
**AGAIff** An IFF-to-RAW converter which can load all ILBM graphics supported by the AGA chipset. It is also able to save 24 Bit colors and sprites wider than 16 pixels. Some features make this program quite attractive: Coded as a Commodity; Coded completely in fast Assembler; Font-sensitive User Interface; <MANY> different save formats; Powerful ARExxort, supporting all stuff from the GUI; Runs even from small Assembler Workdisks if you don't need ARExx, Hotkey and all Displaymodes; ... and more! Manual in AmigaGuide format. Version 1.0, first release. Requires OS 3.0 or later. Author: Michael Krause
- ILBMKiller** An IFF/AGA ILBM file viewer. Has optional delete facility that allows you to sift through large collections of pictures, keeping only the ones you want. Version 1.0, includes source in Blitz Basic. Author: David, Coralie Tucker
- Lines** An OS friendly game, played with the mouse, where the goal is to draw as many lines as you can, obeying the rules. The basic rules are that only eight directions (horizontal, vertical, and diagonal) are allowed, a line is exactly five points long, and each new line can include at most one point that was used in a previous line. Includes both PAL and NTSC versions. Version 2.4, binary only. Author: Mika Kortelainen
- NewIFF** Commodore IFF code modules and examples for OS 1.3 through 3.x. Code requires V39+ includes to compile, and under 1.3 requires the V37 ifparse.library to run. Examples include handling AA display, brush loading, 8SVX playing, clipboard FTXT reading/writing, etc. Version 39.11, includes source in C. Author: CBM, submitted by Carolyn Scheppner



- NewTool** A program that will quickly replace the default tool in project icons. NewTool allows you to specify the default tool to use, use a file requester to pick the default tool, or it will automatically choose the proper tool depending on the file type using What's library. This version is a complete rewrite from v37.203 which appeared on disk 947, and is now more style guide compliant. Also included is NewToolPrefs v1.1 which is a GUI to quickly and easily edit your NewTools.prefs file. Version 2.6, binary only. Author: Michael J Barsom
- SmallPlayer** A small player for those really big modules. The file is less than 10K. Plays powerpacked Protracker modules. This is version 1.0a, first public release. Binary only, public domain. Requires AmigaDOS 2.04 or above. Author: Hallvard Korsgaard
- Fred Fish Disk 986**  
**FDPro2Demo** Demo of Jaeger Software Inc's WWII flight simulator for the Amiga. It has full support for analog joystick and rudder pedals and runs in Hi-res Interface or in DBL NTSC/PAL on AGA machines. Author: Bill Manders, Matt Shaw, Drew Dorman, Ted Jump
- MeMon** An intuition-based utility that allows you to monitor or change specific memory addresses. User may select byte, word, or long word alignment. Displays in binary, hex, and signed or unsigned decimal. Also useful for displaying ASCII codes of various character key mappings and/or as a hex/binary/decimal converter. Version 1.1, an update to version 1.0 on disk number 769. Binary only. Author: David Ekholm
- Phonedir** Personal Phonedirectory is a database for addresses and phone numbers. It can also dial the numbers automatically. Its window can be hidden, and shown again by selecting from the Workbench Tools menu. This is version 2.0, an update to version 1.0 on disk 944. Binary only, freeware. Requires AmigaDOS 2.04 or above. Author: Hallvard Korsgaard
- WBrain** A thinking game for the Workbench. The player must reproduce a random pattern by filling in a grid in the correct order. The difficulty ranges from moderately easy to impossible. Uses very little CPU time and very little memory, so is ideal for playing while raytracing, etc. Requires OS2.0+, Version 2.1a, and update to version 1.2 on disk number 916. Binary only, freeware. Author: Sean Russell
- XFD** This software package allows you to decrunch nearly every crunched file known to the Amiga. It consists of the xfdmaster.library as the brain and a couple of programs that offer certain functions to the user. The xfdmaster library, successor of the decrunch.library, is a standard Amiga shared runtime library. It works with Kickstart V33+ and offers applications the possibility to directly support crunched files of any kind. Version 1.00, binary only. Author: Georg Hörmann
- Fred Fish Disk 987**  
**Calc** An RPN (Reverse Polish Notation) calculator with a 7-element stack window. Includes the standard arithmetic operators, plus swap, drop, power, root, natural log, exponential, sin, cos, tan, arcsin, arccos, arctan and hex/decimal display modes. Version 2.0, binary only. Author: Sean Russell
- History** This is a 2.04/3.0/3.1 compatible version of the history command. It allows listing, saving, loading, and execution of the standard con-handler command line history. This is version 37.5, binary only. Author: Andy Finkel
- LhSFX** An oldie, but goodie, that somehow missed getting included in the AmigaLibDisks. LhSFX is a self-extracting archive creator. Update from the original program written by Mike Kennedy. Now uses a file requester. Has many bugs fixed. Version 1.5, freeware, includes source in assembler. Author: Ralf Thanner, Mike Kennedy
- LoanCalc** A mortgage/loan calculation utility. Although similar programs exist, this one is unique in that it is designed to track 'Open' mortgages that allow any size payment to be made at any time, as well as providing a printed Amortization Table for Fixed mortgages with monthly, semi-monthly, bi-weekly and weekly payment re-schedules. This is version 2.0, an update to version 1.4 on disk number 492. Binary only, giftware. Author: Robert Bromley
- MCalc** MUIProCalc is a MUI-based calculator much like Jimmy Yang's Calc 3.0. It still lacks the plotter, but it offers a quite flexible history facility for inserting previously entered expressions. Different output formats offered and plenty of functions the user may choose from. Furthermore the look of the calculator may be customized. It offers an AREXX Port, which may be used to let MUIProCalc calc from within an editor for example. MUIProCalc may return a TeX compatible output, which may be used within a mathematical TeX environment. Results or inputs may be copied to the Clipboard. This version fixes some bugs. Requires MUI (MagicUserInterface by Stefan Stuntz) GiftWare. This is version 1.3, includes source. Author: Kai Iske
- Fred Fish Disk 988**  
**DQua** A simple GUI-based utility that solves quadratic equations. Version 1.00, includes source in HighSpeed pascal. Author: Lee Kindness
- MegaBall** Classic amiga action game! Comes with two graphics files, one that lets it run on older Amigas (even ones running WB 1.2!), and another that lets it take advantage of dazzling 24-bit AGA graphics if ya got 'em! Packed with a whole bunch of exciting new features, music and boards. Documentation in AmigaGuide format. Version 3.0, shareware, binary only. Author: Ed Mackey
- MemClear** A tool for programmers which fills unused memory chunks with zeros or any other byte value. In addition to that, it is a pure replacement for 'Avail' and can flush unused system resources, such as libraries, devices, and fonts. The memory type to be filled can be selected (chipmem, fastmem, both). It also warns if a defective memory structure is recognized. Version 1.8, binary only, freeware. Author: Ralf Thanner
- Fred Fish Disk 989**  
**AntiCicloVir** A link virus detector and exterminator. Also detects other types of viri. This version can detect: 126 Bootblock; 17 Link; 28 File; 7 Disk-Validator; 14 Trojans; and 8 Bombs; Automatically checks each inserted disk for boot block and disk-validator viruses. Can scan all files of a specified directory for known link viruses, and constantly monitors memory and system vectors. This is version 2.1, an update to version 2.0 on disk number 865. Binary only, freeware. Author: Matthias Gutt
- FlipIt** A commodity that lets you install hotkeys for flipping through screens. FlipIt lets you specify a hotkey to push the frontmost screen to the back, and a hotkey to bring the rearmost screen to the front. This is useful when using programs that do not have depth gadgets on their screens. Version 1.0. WB 2.0+ required. Binary only. Author: Michael J Barsom
- PicCon** PicCon is short for "Picture Converter". This is a utility made for programmers, which will convert IFF ILBMs plus any picture format you've got support for in your datatypes library to an appropriate image format. This is an essential stage mainly in the development of games, but is also useful in development of other software (like demos, applications, etc.). Not only whole pictures can be converted, but also parts of pictures can be cut out to be saved as e.g. sprites or small bitplanes. Version 2.01, binary only. Author: Morten Eriksen
- VirusZII** Release II of this popular virus detector that now recognizes 279 boot and 145 file viruses. The filechecker can also decrunch files for testing. The memory checker removes all known viruses from memory without 'Guru Meditation' and checks memory for viruses regularly. VirusZ has easy to use intuitionized menus including keycuts for both beginners and experienced users. Release II versions of VirusZ require OS2.0+. This is Release II Version 1.03, an upgrade to Release II version 1.0 on disk number 948. Binary only, shareware. Author: Georg Hörmann
- Fred Fish Disk 990**  
**BootWriter** A bootblock installer with many features. You can install either an official bootblock, an inbuilt one with the possibility to enter some text, or any other bootblock of your choice. Bootblocks can be saved and loaded as either normal or powerpacked files. Bootblock files and disks' bootblocks are checked for viruses using the recognition code of VirusZ, and, if available, the bootblock.library and brainfile (BBBF). There are about 550 different bootblocks recognized. All filing systems are supported. This package also contains the assembler includes for the Bootblock.library which were missing on AmigaLibDisk919. Version 1.2, binary only, freeware. Author: Ralf Thanner
- SCSIUtil** CLI utility to issue commands to a SCSI disk using a specific SCSI id number. Commands include inquiry, seek, start/stop motor, read sector(s), play audio CD sectors, insert, eject, read capacity, etc. This is version 2.02, an update to version 1.815 on disk 889. Includes source in C. Author: Gary Duncan
- Stocks** Demo version of a stocks analysis program. Provides powerful technical analysis using numerous studies including Candlesticks, traditional bar charts, 3 moving averages, MACD, Stochastics, Gann, TrendLines, %R, Average Volume and more. It generates buy/sell signals based on customizable trading rules and graphs daily, weekly, and monthly charts using a simple ASCII data file format compatible with CompuServe historical data. Displays on Workbench or Custom Public Screen. Includes on-line AmigaGuide help text. Version 3.04a, an update to version 3.02a on disk 964. Binary only. Author: James Philippou, Bug-Free Development
- Fred Fish Disk 991**  
**ASwarm!** A "high security" Screenblinker commodity (will not burn-in the phosphor even when the CPU is really busy). Based loosely upon Jeff Butenworth's "xswarm" for X11 Windowing System, it shows from 1-10 "wasps" being chased by 1-500 "bees". Screen will blank entirely under periods of high CPU usage. Requires Amiga OS 2.04 and MUI 1.4 or later. This is version 2.0, an update to version 1.3 on disk 798. Includes source. Author: Markus Illenseer, Matthias Scheler
- CopCoEd** An editor for colors that can be displayed using the Amiga's COPPER. This program was made for PROGRAMMERS. This is version 1.2, binary only. Author: Ludwig Huber
- Iconlan** An icon editor that supports OS 3.x functions, AGA display modes such as palette sharing, and 256 colors. Iconlan should do everything IconEdit can, and more. IFF brushes are remapped to the current Workbench screen colors, using the new palette sharing functions under KickStart 3.x. All common drawing tools are present, including bevel boxes. Several resizable windows are used. This is version 1.903, shareware, binary only. Author: Chad Randall
- MMBCommodity** THE ultimate utility for the 3-button-mouse-owner. Near free definition for the midbutton, more qualifiers in conjunction with the right button etc. Requires OS 2.0. Version 1.0, giftware, binary only. Author: Roland Janus
- PrtSc** Have you ever noticed that there is a PrtSc key on the numeric keypad? This program makes it work! By pressing the PrtSc key on your keypad, you get a screen dump to your printer. Now includes a GadTools interface for better looks and the ability to dump the screen to a file instead of the printer if desired. Version 1.75, an update to version 1.52 on disk number 945. Freeware, includes source in assembler. Author: Jan Hagqvist
- SmartCache** A small (about 3K) 100% assembly language program that patches itself into the 'trackdisk.device' to provide a whole cylinder 'Caching' mechanism for all the floppy disk drives (including the new HD floppy drives) that you have connected to your Amiga. This program has been designed to boost the floppy performance by using your excess memory in a shared cache scheme. This program is a must for floppy based systems, that have the free memory! Tested under 1.3 through 2.1. Version 1.77a, binary only. Author: Thomas J. Czarniecki
- Fred Fish Disk 992**  
**Csh** Replacement for the Amiga shell, similar to UNIX csh. Main features include over 100 built in commands, 70 functions, new system variables, file name completion, freely programmable command line editing, file classes, auto cd, lazy cd, intuition menus for the shell window, automatic RX-ing, local variables, (\$), statement blocks, high speed, plus much more. This is version 5.37, an update to version 5.31 on disk 889. Includes source in C. Author: Andreas M. Kirchwitz, et al.
- CyberPager** Allows one to send alphanumeric (i.e., full text) messages to a pager from an Amiga. This is accomplished by dialing into an IXO protocol compliant pager central and uploading messages. Features include Alias file for commonly paged people to be referred to by name rather than cryptic PIN numbers. "Groups" file allowing messages to be easily sent to many people working on the same project, in the same department, etc, supports multiple pager centrals through a services configuration file, full logging of messages spooled, dialout attempts, etc. Includes sample rex scripts to generate automatic messages, page the current person on duty, etc. This is version 1.4, an update to version 1.2 on disk 907, and incorporates a couple bug fixes. It also provides support for services which require a real password at login time. This support will require you to update your services file. Includes source in C. Author: Christopher A. Wichura
- KMI** Kochtopfs MagicWB Icons (KMI) are some new icons for MagicWB by Martin Huttenloher, includes some Directory Icons, some Prefs Icons, WBStartup Icons, and many Toolmanager Dock Icons. Author: Christian Scholz
- WbSm** Activates or deactivates programs that are run from the WBStartup drawer. When run from the user-startup script holding down the LEFTMOUSEBUTTON during boot up will popup the Workbench Startup Manager GUI. Since the user-startup



- script is executed before the programs in the WBStartup drawer are run, your selection will be valid in that very session. Version 1.2, binary only. Author: Herbie van Staveren
- Fred Fish Disk 993**  
**Fleuch** A little game with 29 extra large stages. The object is to pick up your cargo and climb safely to the next stage, without being shot or running into anything. (including your cargo!). Scrolling, shooting, some gravitation, similar to Thrust (C64). Version 3.0, an update to version 2.0 on disk number 932. Binary only. Author: Karsten Goetze, Andreas Spreen
- IRMasteR** Software/hardware project to control devices with an infrared remote control (tv set, cd player etc.) with an amiga. Using the IR-editor you can build a remote control, learn the IR commands, and launch projects with the IR-runner. That means you can control e.g. your tv set from the Workbench. Version 2.2, an update to version 1.0 on disk 943. Binary only. Author: Jürgen Frank, Michael Watzl
- MUIFFR** MUI Fido File Request is a GUI for selecting files from a filelist, which almost every FidoNet mailbox provides for download. The list of selected files is written to a .REQ-file in your outboard directory. The next time you call up your Fido Boss these files are automatically downloaded by your FidoNet communications software. This is version 1.1, includes source in C. Author: Martin Stepler
- Fred Fish Disk 994**  
**AddPower** A utility that adds some miscellaneous useful features to the 2.0+ OS. Includes: file requesters in any program, stop drive clicking, fix menus and pen colors of pre-2.0 programs, wildcard \* = #?, make screen borders black, open any window on front screen. All features are independently configurable. Workbench and AmigaDOS interfaces with online AmigaGuide documentation. Version 37.14, an update to version 37.6 on disk number 939. Binary only. Author: Ian J. Einman
- JukeBox** A program to play compact digital audio discs by emulating a graphical user interface similar to common CD players. Supports various vendor's SCSI-CDROM-player, CDTV and A570. It provides a command line oriented, fully programmable ARexx user interface, as well. This is version 1.2530, an update to version 1.2522 on disk 819. Shareware, binary only. Author: Franz-Josef Reichert
- TheGuru** The Guru is a program that helps you to understand the strange GURU message numbers like 8000000B. This is the first public release. Version 2.3, binary only. Author: E.Lensink
- ToolType** A program to make it easier to edit tooltypes in icons. ToolType will read the tooltypes from an icon file and let you use your favorite text editor to change or add to the tooltypes. ToolType can be run from shell, from Workbench, or set up as an appicon. Includes an option to sort the tooltypes alphabetically. Version 37.210, an update to version 37.206 on disk 934. Binary only. Workbench 2.0 or later required. Author: Michael J Barsom
- Fred Fish Disk 995**  
**BrowseIt** A "Programmer's Workbench". Allows you to easily and conveniently move, copy, rename, and delete files & directories using the mouse. Also provides a method to execute either Workbench or CLI programs by doubleclicking them or by selecting them from a ParM like Menu with lots of arguments. Uses whatIs.library to detect file types and executes commands based on these. Version 2.41, an update to version 2.13 on disk number 843. Binary only, shareware. Author: Sylvain Rougier, Pierre Carrette
- ParM** Parametrable Menu. ParM allows you to build menus to run your favorite tools. ParM can run programs either in Workbench or CLI mode. ParM can have its own little window, can attach menus to the CLI window you are running it from, or to the WB menus. It has a builtin mouse accelerator, screen blanker, etc. Available languages: english, french, deutsch, italiano, norsk, svenska, dansk. Version 4.5, an update to version 4.3 on disk number 843. Binary only. Author: Pierre Carrette, Sylvain Rougier
- WhatIs** WhatIs.library can detect file types and is fully parametrable by an ascii file. You can describe file types and they will be recognized by the library. Includes a few tools (w/source) for the manipulation of filenames. This is version 4.0, an update to version 3.4 on disk number 843. Requires OS 2.0+. Binary only. Author: Sylvain Rougier, Pierre Carrette
- XprKermit** An Amiga shared library which provides Kermit file transfer capability to any XPR-compatible communications program. Supports version 2.0 of the XPR Protocol specification. In addition to fixing known bugs in XPR Kermit 1.111, it adds: sliding windows support, attribute packets, full update of download status (number of bytes transferred, time elapsed, time left) and many other features. This is version 2.35, an update to version 1.5 on disk number 330, includes source. Author: Stephen Walton, Frank da Cruz, Marco Papa
- Fred Fish Disk 996**  
**Aren** An extension of the DOS Rename command. Supports wildcards and allows you to change or remove part of a filename. This is version 1.2, shareware, includes source in C. Author: Marc Mendez
- ECopy** A utility to copy files from mass storage devices onto floppy disks, so that it takes the minimum number of disks. Files can be optionally moved. Uncopied files can have their names saved to a file and be used for copying at a later time. Great for picture and music collectors. This is version 1.10, freeware, includes source. Author: Sam Yee
- NewEXT** A CLI command which renames files, retaining the original name minus the extension and adding on the specified extension. Supports wildcards. Version 1.0, includes source in HighSpeed Pascal. Author: Lee Kindness
- Startup-Menu** This utility produces a decisive menu (ie one choice then it quits) on start-up which is fully customisable and offers an unlimited amount of gadgets/choices. Version 1.00, includes HighSpeed Pascal Source. Also includes a small script file utility call GetOption, with Pascal source. Author: Lee Kindness
- Taulcons** Third release of these icons for MagicWB users. Includes several new and many updated icons to that of the first release. Also includes step by step documentation on how to install the icons retaining the tooltypes of the originals. Version 1.5. Author: Osma Ahvenlampi
- Fred Fish Disk 997**  
**MTool** MultiTool II is a directory utility resembling DMaster V1.4 (cosmetically only). It offers all basic functions (copy, delete,...), special features can be configured using external programs. LH-Archives can be double clicked like directories causing MTool to display the archive contents in the directory list. Now you can copy files into the archive (add), out of the archive (extract) or delete them. MTool supports different screenmodes, localization, fonts, it opens an appwindow and works as a commodity. Everything is set up with a very user friendly prefs editor. MTool needs OS2.0 (or higher). Version 2.0a, shareware, binary only. Author: Boris Jakubasch
- Fred Fish Disk 998**  
**bBasell** An easy to use, versatile, yet full featured database program that will run on any Amiga with WB1.3 or subsequent. Search or sort on any field, print mailing labels, delete or undelete records, mail merge, get reports in many formats, scramble files, flag records, and more. Fields are user-configurable, so bBase can be used to keep track of addresses, tape or video collections, recipe files, or anything else you can think of one program does it all! bBasell is a greatly enhanced successor to bBasell. This is version 1.43, an update to version 1.4 on disk 923. Shareware, binary only. Author: Robert Bromley
- ScreenSelect** A commodity to change screen order by selecting a screen name from a listview. Also allows binding of hotkeys to any screen with a proper name. Supports automatic activation of windows (remembers last activations) when changing to new screen, is configurable with Preferences program, has a full intuition interface and is font sensitive (including proportional fonts). Documentation in AmigaGuide, ASCII and DVI formats. Requires AmigaOS 2.04 or later. Version 2.2 an update to version 2.1 on disk 947. Freeware, binary only. Author: Markus Aalto
- TeXPrT** A front-end for DVI printer drivers based on Stefan Stuntz's MUI. It is highly configurable and can be used with various DVI printer drivers. Configuration files for Georg Hessmann's DVIPrint (PasTeX), DVIJLP (AmigaTeX) and DVIJ2P (Gustaf Neumann) are included. TeXPrT has an ARexx port and interprets 17 ARexx commands. TeXPrT opens an AppWindow and supports an (optional) Applcon for selecting DVI files. Needs at least Kickstart 2.04 and MUI. This is version 3.0, an update to version 2.0 on disk 892. Freeware, includes source in C. Author: Richard A. Bödi
- Touch** A simple TOUCH command, known from UNIX systems. It will touch all files (including patterns) given on the command line. If a particular file (not including wildcards) does not exist, it will be created; just like under Unix. This is version 1.3, public domain, includes source. Author: Kai Iske
- Fred Fish Disk 999**  
**ADAM** A calculation program that is able to handle numbers with up to some thousand digits before and after the decimal point. This is version number 3. The (German) source code in assembly language is included. Author: Michael Lorek
- ASplit** Splits binary/text files into smaller units, to be transferred to removable storage units. It looks like 'split' under Unix, but this version allows you to specify the size in bytes (instead of lines). Version 2.0, shareware. Includes Source in ANSI C, so it can be compiled on any machine. Author: Marc Mendez
- DBB** Digital Breadboard is a full GUI digital circuit simulator. Digital Breadboard currently supports 2 and 3 input AND, OR, NAND, and NOR gates, NOT and XOR gates, D, JK, and SR edge-triggered flip-flops, multiple independent clocks, switched and pulsed inputs, outputs, Vcc, GND, independent 4-channel trace scope, event counters, variable speed timer, preferences printing, and more. Includes combinational logic design utilities. Version 1.1.9, an update to version 1.1.5 on disk 844. Author: Dan Griffin
- HQMM** Hero Quest MapMaker. With HQMM, you can create your own missions for Hero Quest, the board game. You can place all objects that are in the Hero Quest set (doors, traps, furniture, monsters etc.) on the map and you can write your own story to go with it. All this will be printed out in the same style as the original Hero Quest missions. Version 1.14, an update to version 1.11 on disk number 959. Requires OS2.0+, binary only, freeware. Author: Camiel Rouweler
- QuadraComp** A music tracker which uses the internal Amiga sound capabilities. Features: Uses standard intuition windows; Handles the Protracker and Extended Module (EMOD) formats; Built-in synth in the sample editor; More and longer samples can be used than in normal trackers; Amusing realtime sample displays. Version 2.03, an update to version 2.0 on disk number 930. Binary only, shareware. Package also includes QuadraPlayer, a relatively small, freeware module player, that handles both Protracker modules and Extended Modules (EMOD's). The music is shown visually in the Monoscope, VU-Meters and SpectraScope. Version 1.0, binary only. Author: Bo Lincoln & Calle Englund
- Fred Fish Disk 1000**  
**BTNTape** The "Better Than Nothing" SCSI tape device handler. It provides flat-file access to a SCSI tape drive from application programs using simple calls to DOS or C library I/O functions. It can also be used with the Amiga TAR utility for disk backups. It uses your existing SCSI adapter's device driver for access to the bus. This is version 3.0, an update to version 2.1 on disk 558. It fixes a number of bugs and includes several new features including file number tracking and append-only and read-only safety modes. Includes C source and extensive documentation. Author: Robert Rethemeyer
- Enforcer** A tool to monitor illegal memory access for 68020/68851, 68030, and 68040 CPUs. This is a completely new Enforcer from the original idea by Bryce Nesbitt. It contains many new and wonderful features and options and no longer contains any exceptions for specific software. Enforcer can now also be used with CPU or SetCPU FASTROM or most any other MMU-Kickstart-Mapping tool. Major new output options such as local output, stdout, and parallel port. Highly optimized to be as fast as possible. Version 37.60, an update to version 37.55 on disk 950. Binary only. Author: Michael Sinz
- FishRachel** This picture is a hand drawn cartoon picture of Rachel the Raccoon "Just Fishin'" to commemorate the 1000th disk in the Freely Redistributable Amiga Library. It is an NTSC Hires-Interface (704x480) IFF picture, and is provided in 8-color, 16-color, and 128-color versions for use on all Amigas. Author: Les Dietz
- PolyFit** A program to fit straight lines, polynomials and exponential curves to sets of points. Can fit to polynomials of degree of 16 and lower. Calculated coefficients can be printed and saved. A graph of the points and curve can be shown (in any screen resolution), printed and saved as an IFF file. Supports localization. Version 1.21, OS2.0 and higher, freeware, binary only. Author: Camiel Rouweler
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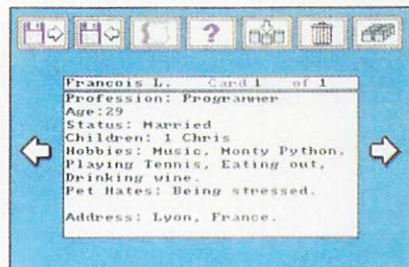


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4	8	Zool
5	3	Football CD <sup>32</sup>
6	4	Defender Of The Crown
7	-	Chaos Engine
8	-	Lotus Trilogy
9	5	Nigel Mansell
10	9	Sim City

### Top 10 Amiga Game Titles

APR	MAR	
1	-	Hired Guns
2	2	Alien Birds 2 & Body Blows Galactic Bundle AGA
3	3	Frontier: Elite 2
4	9	Tom Landry Football Deluxe
5	1	Mortal Kombat
6	8	Settlers
7	-	Global Domination
8	-	Brutal Sports Football
9	5	Stardust
10	-	Chaos Engine

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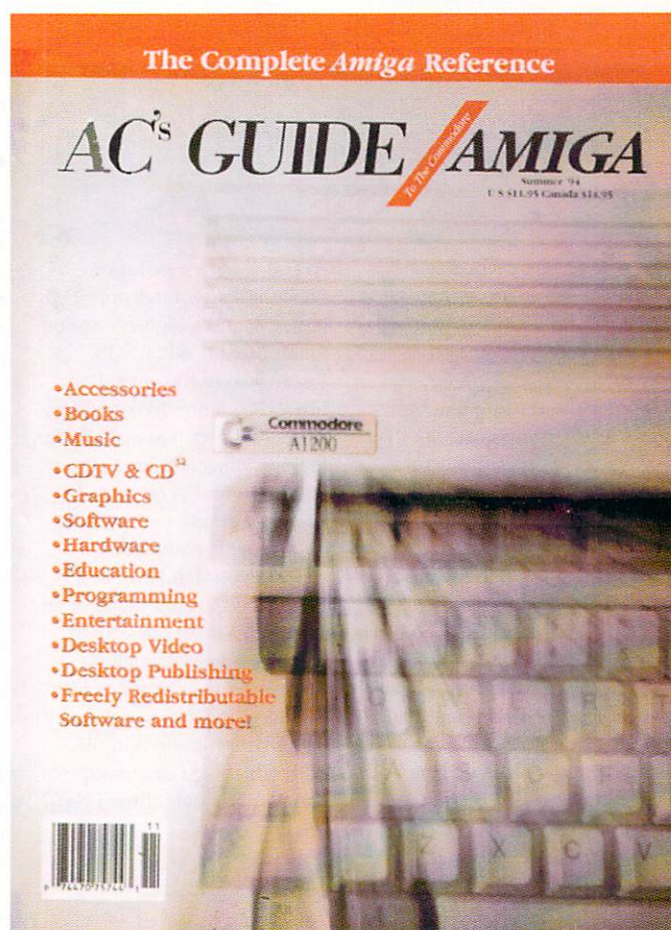
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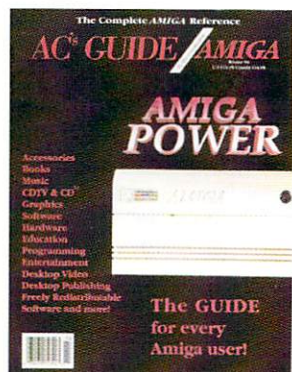
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# DIVERSIONS

## A-Train Construction Set by Jeff James

If you've ever owned and enjoyed a miniature train set, the A-Train Construction Set (ATCS) could be just what you've been looking for. Forget about using that bulky miniature train diorama covered in green glitter and plastic trees: ATCS lets you build mountains, lay rail, and oversee a thriving train business all within the tidy confines of your Amiga.

ATCS requires — and is now bundled with — A-Train from Maxis. Whereas A-Train supplies the basic scenarios, trains, and main program, ATCS allows you to create new and customize existing A-Train scenarios. The program ships in two versions, just like

A-Train: a low-resolution version that requires only 1MB of RAM, and a high-resolution variant that needs 1.5MB. Regardless of the resolution used, the game's look and feel closely follows that of A-Train, making it easy for users familiar with the original A-Train program.

To start editing or altering your landscapes, you'll need to either load in an existing A-Train scenario or create one from scratch. Once the scenario you want to edit is loaded, ATCS gives you a wealth of program options with which you can manipulate your virtual railroading empire.

A toolbar located at the bottom of the screen provides access to most of these features, including a train and subsidiary menu that allows you to place trains, lay rail and perform other railway duties. In addition to the more traditional track-laying features, you can buy and place properties as you see fit, ranging from golf courses and amusement parks to office and apartment buildings.

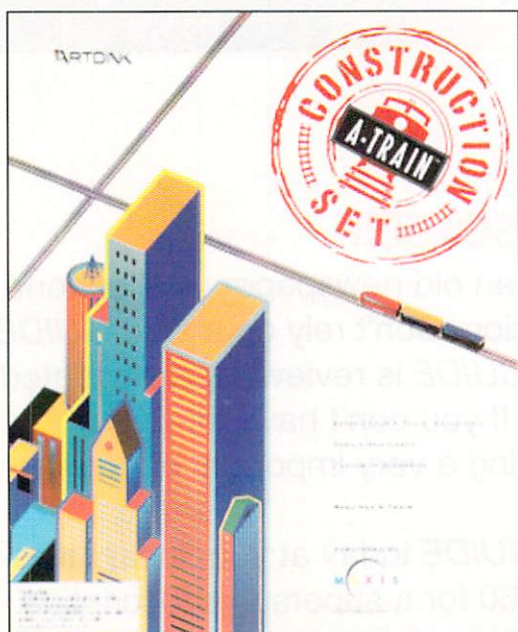
Perhaps the most interesting collection of tools reside in the map edit windows, accessed by selecting one of eight buttons from the toolbar. Using these program options, you can level and raise terrain, plant trees, and carve rivers, islands and lakes out of the landscape with just a few mouse clicks. Finally, a limited on-line help system provides short explanations and descriptions of some game elements. Once you've tweaked your scenario to perfection, you can save the scenario and test your construction prowess by playing the scenario in A-Train.

On the more technical side of things, program graphics are a little on the plain side (sporting not more than sixteen colors), and sound effects are limited to moving trains and other minor sound effects. Granted, these limitations are inherent to the original A-Train program. ATCS fully supports hard drive installation, complete with a polished point-and-click hard drive installation program. Once installed, ATCS occupies approximately 1MB of hard drive space. As

with A-Train, scrolling about the map is a bit pokey on slower Amigas; owners of accelerated Amigas are treated to snappier response and loading times. Multitasking is not supported, although ATCS did exhibit complete compatibility with a wide range of Amigas running both AmigaDOS 2.0 and 3.0. The instruction booklet is a brief document of about twenty pages, and covers both the Macintosh and Amiga versions of the program.

Although an attractive purchase for railroading aficionados, ATCS — and A-Train, by extension — might not be every Amiga gamer's cup of tea. More so than some Maxis products, ATCS is long on simulation detail and somewhat short on playability. If you prefer a faster pace to your railroad simulations, you should journey a bit farther down the tracks and pay a visit to Microprose's venerable Railroad Tycoon. ATCS definitely extends the usefulness of the original A-Train, making it a must-buy for avid A-Train gamers. If you've always wanted to build your own railroading empire (and move a few mountains and part some water in the process), ATCS should be just what the conductor ordered.

**A-Train Construction Set**  
**Retail Price: Bundled with A-Train (\$69.95)**  
**Requires: A-Train, 1MB RAM**  
**Maxis**  
**Suite 230**  
**Orinda, CA 94563-3346**  
**Tel: (510) 254-9700**  
**Inquiry #205**





## Hired Guns

by Jeff James

The story line in *Hired Guns* — the latest action game from Psygnosis — is anything but new. A barren moon has been overrun by bio-engineered monsters, causing an urgent plea for help to be sent out into the cosmos. True to your heroic nature, you and your team of battle-hardened mercenaries is quick to answer the call for aid — for a fee, of course. After you've landed on the moon, (optimistically called 'Graveyard') you must scour the surface to locate four fusion power rings which you'll use to blast the moon's starport into radioactive bits.

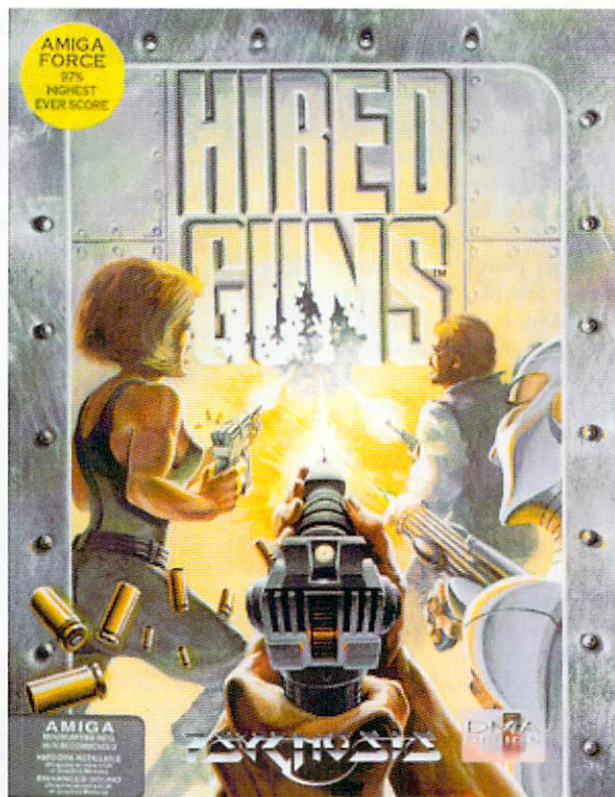
To prepare you for this task, *Hired Guns* provides three sets of increasingly difficult scenarios. The first five are embarrassingly easy training missions that allow you to get the hang of the game controls. Next up are the short action missions, which introduce you to real combat in a variety of situations. After honing your skills in these missions, you're set to take on the heart of the game — the campaign scenario. As mentioned previously, this mission requires you to exterminate all hostile xenofoms on Graveyard and save the galaxy. (Or at least a small part of it.)

To aid you in this endeavor is a team of pre-generated characters with their own unique skills and abilities. Up to four can be active at once, chosen from a twelve-member collection that includes a pair of death-dealing combat robots, a cyborg, an assassin, and a handful of mercenaries and other deadly characters. Regardless of whom you select, you don't have to control them all by yourself. *Hired Guns* allows up to four players to play at the same time on the same computer, each controlling a separate character. This is accomplished by using a variety of mouse, joystick and keyboard combinations,

with two players usually using mice or joysticks and the remainder pecking away at the keyboard.

To accommodate all four players, the game screen is portioned off into four separate quadrants, one for each player. Each of these four sections is broken down into four separate displays, accessed by pointing and clicking on folder-like tabs at their edges. The primary viewscreen provides a three-dimensional view of the player's surroundings, while an inventory screen keeps track of what valuables the character is currently carrying. A status screen keeps an eye on the character's health and other statistics, while a mapping screen provides an overhead view of the character's surroundings — provided that a Digital Terrain Scanner (DTS) is being used.

While an enjoyable gaming experience for one player, *Hired Guns* comes into its own when more than two players are involved. Players can compete or work in concert to complete mission goals, each operating independently of one another. Trigger-happy players can easily decimate their cohorts with an ill-timed grenade toss or a too-lengthy burst of cannon fire. If players do manage to avoid killing one another, the motley menagerie of monsters, combat robots and other hostile entities in the game will do their best to finish the job. *Hired Guns* provides a bewildering array of high-tech gadgetry and weapons players can use to defend themselves, ranging from neutron flux cannons and grenade launchers to 9mm handguns. The entire gaming experience does an admirable job of immersing players in the science fiction genre. Gamers familiar with the films *Predator*, *Robocop* and *Aliens* should feel right at home on the barren surface of Graveyard.



Most of the gripping game atmosphere comes from exceptional music and sound effects — background noises of slithering beasties and dripping water accentuate the gloomy action on-screen. Amiga owners with at least 1.5MB of RAM are treated to additional music and sound effects, including the rumble of distant thunder, a wider variety of weapon noises and other ephemeral sound effects. In terms of animation, I found the stop-and-go nature of movement through the *Hired Guns* gameworld to be somewhat disorienting; each character advances in segmented jumps, not unlike the movement method used with more success in such products as *Dungeon Master* and *Eye of the Beholder*. Graphics are generally clean and detailed, although the small screen area devoted to each player's viewpoint results in some on-screen objects and monsters appearing rather crude and blocky. If you're not satisfied with how your characters look on-screen, you can break out any IFF-compatible paint program (such as *Deluxe Paint*) and edit the character images yourself. Using this method you can easily fashion

your on-screen alter ego to resemble anything imaginable, including a self-portrait.

In addition to allowing users to customize character graphics, *Hired Guns* offers several other unique — and helpful — program features. Hard-drive installation is fully supported, complete with a push-button installation program that quickly copies the five game disks to your hard-drive. The original diskettes are not copy protected, although a code must be manually entered into the game to continue play. *Hired Guns* doesn't directly support multitasking, although hitting CTRL-W will pause the game and return you to the Amiga Workbench, allowing you to put the game on hold when you must perform a task of a less entertaining nature. Clicking on a button inside the resultant pause window will return you to the game. While the game is paused, you can peruse the robust amount of game documentation.

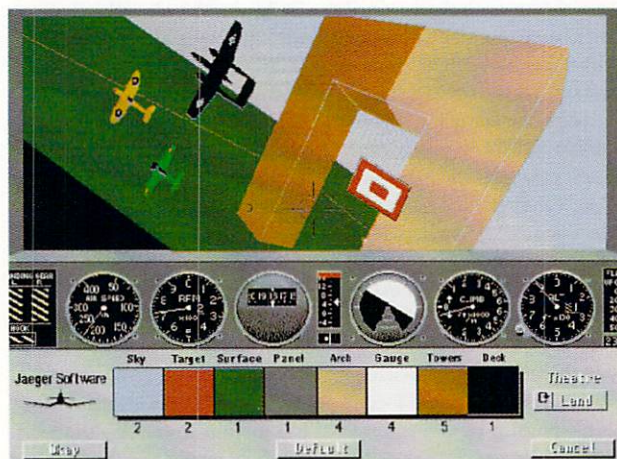
*Hired Guns* is quite possibly the most well documented product ever from Psygnosis. Four hefty booklets comprise the printed documentation of the



game, including a 32-page instruction manual, a quick start guide and two manuals that provide background information and fiction for the game.

As playable as *Hired Guns* is, a few glitches preclude it from gaming greatness. The inventory system is needlessly cumbersome, painfully so when three or four players are trying to exchange items and supplies during a firefight. As flexible as *Hired Guns* is in accommodating multiple players at the same computer, the two-player mode only supports two mice, an unusual combination that the vast majority of Amiga owners are unlikely to have access to. *Hired Guns* also doesn't support the 256-color AGA chip set, although a sequel is rumored to be in the works which will add this feature. Granted, these are only minor shortcomings that detract little from an otherwise excellent product. If you like eye-opening action, blood-spattering violence and gobs of bug-eyed monsters in your computer games, look no further than *Hired Guns*.

**Hired Guns**  
**Retail Price: \$59.95**  
**Requires: 1MB RAM**  
**Psygnosis Ltd.**  
**675 Massachusetts Ave**  
**Cambridge, MA 02139**  
**Tel: (617) 497-7794**  
**Inquiry #230**



**Fighter Duel Pro2:** The instrument panel is the same, except for instrument markings, in every plane you fly.



## Fighter Duel Pro2

by Rob Hays

It is a beautiful day for flying; the sun is burning bright and hot in the clear blue sky. As you scan the hazy horizon for enemy planes, a stream of tracers narrowly misses your canopy. Slamming the joystick to the limits, your plane claws around in a high-g turn, as you try to bring your sights to bear on the bogey that managed to sneak up on you. As you line up your sights and

pull the trigger, your tracers find their mark. A trail of black smoke pours back from the damaged fighter, and after taking a few more hits, it suddenly explodes in a ball of fire.

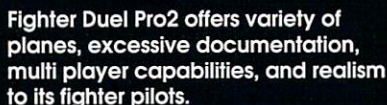
Welcome to the fast and furious world of fighter combat, World War II style, courtesy of Jaeger Software. Jaeger set the Amiga flight simulator community on its ear with their first product, *Fighter Duel*. The fantastic frame rate, panning view system, and aerodynamic modeling that gave you the feeling of actually flying the planes, were all hallmarks of the original. The ability to duel in real-time over relatively slow modems sparked nationwide dueling tournaments. Unlike too many software companies, and unlike virtually every game company, Jaeger followed their first version with an enhanced *Fighter Duel Pro*. *Pro* allowed you to choose from among 16 American, British, German, and Japanese

planes for yourself and up to two computer controlled opponents, as well as other enhancements. Now, little more than a year later, comes *Fighter Duel Pro 2*.

The number of available aircraft is now up to 25, and includes the German ME-163 rocket powered Komet, and the ME-262 jet. Also included is the huge American P-61 Black Widow, and less famous planes from Japan, Britain, and Russia. Computer controlled enemies now number up to four, each with eight levels of skill. You can change the skill levels of the opponents at any point by pausing the flight, and plane types for the foes and yourself can be changed without re-booting.

In typical Jaeger fashion, new features have been added based on user input, and yet in most cases, the old features have also been retained. For instance, two things users have been requesting since the start have been keyboard control of aircraft functions, and realistic action of the bullet stream from the planes. With *Pro2*, both have been added. Something else that had previously been termed "impossible" by Jaeger is keyboard selectable views.





•AC•



# AC's Back Issue Index

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 "SuperJAM 1.1," a review of the latest release of SuperJAM! by Rick Manasa

"ImageFX," review by R. Shams Mortier

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 "Pseudo Radiosity Effects," why ray tracing is not an accurate model of true light behavior, by Mark Hoffman  
 "T-Rex Professional", a review of the latest release of T-Rex from ASDG, by Merrill Callaway  
 ALSO: AC Phone Book: A directory of Amiga Developers!

Vol.8, No.9, September 1993

Highlights Include:

"Adventures with Aladdin", Part III of this tutorial series on Aladdin 4D, by R. Shams Mortier  
 "CanDo," First installment of this series for CanDo programmers, by Randy Finch  
 "Caligari 24," Review of version 3.0 of this 24-bit software, by R. Shams Mortier  
 "Coming Attractions," A look into the future attractions in Amiga games, by Henning Vahlenkamp  
 ALSO: WOCA—Australia & Summer CES!

Vol.8, No.10, October 1993

Highlights Include:

"Making Waves", Focus on the wave requester in Part IV of the Aladdin series, R. Shams Mortier  
 "Clouds in Motion," Animated clouds in Scenery Animator, by R. Shams Mortier  
 "Media Madness," Discover what it can do for Bars&Pipes, by Rick Manasa  
 "Bars&Pipes Professional 2.0," review by Rick Manasa  
 "Bernoulli MultiDisk 150", A review of this great Iomega drive.  
 ALSO: Commodore's new CD32!

Vol.8, No.11, November 1993

Highlights Include:

"CanDo", This installment covers developing a custom object by combining several standard CanDo objects, by Randy Finch.  
 "Brilliance," A complete review of this hot new paint and animation program from Digital Creations, by Frank McMahon.  
 "Online," The introduction of this new telecommunications column for the Amiga, by Rob Hays.  
 "Get Graphic: Digital Image F/X," The introduction of AC's new graphics column, by William Frawley.  
 "Picasso II", A review of one of the best new graphics cards available, by Mark Ricken.  
 ALSO: WOCA Pasadena: Commodore introduces CD-32! Plus, the incredible LightRave, a Video Toaster emulator!

Vol.9, No.1, January 1994

Highlights Include:

"Designing Holiday Cards", Using your favorite DTP programs to create holiday cards, by Dan Weiss.  
 "Accent on Multimedia," First in a series exploring the history and concepts behind multimedia, by R. Shams Mortier.  
 "Primera Printer," Review of this low end, inexpensive color printer, by Merrill Callaway.  
 "Commodore 1442 Monitor," In-depth study of this comprehensive Amiga paint package, by R. Shams Mortier.  
 ALSO: Commodore Shareholders Movement

Vol.9, No.2, February 1994

Highlights Include:

"Amiga on Internet", Exploration of Internet and its services, by Henning Vahlenkamp.  
 "EGS 28/24 Spectrum," A review of this hot graphics card from GVP, by Mark Hoffman.  
 "Magic Lantern" A new animation compiling program for all Amiga display modes, by R. Shams Mortier.  
 "Get Graphic: Digital Image F/X," Using ARexx, Opal Paint, ADPro, and DeluxePaint to process images, by William Frawley.  
 ALSO: Exclusive interview with Lew Eggebrecht!

Vol.9, No.3, March 1994

Highlights Include:

"Amiga Stars at Medical Convention", Medical multimedia on the Amiga, by Michael Tobin, M.D.  
 "CanDo vs. HELM," Head-to-head review of two leading Amiga authoring systems, by Randy Finch.  
 "PD Update," This month, a description of AlertPatch 2.9 and other shareware and freeware utilities, by Henning Vahlenkamp.  
 "Scala MM300," A review of the program believed to be "hot stuff" for anyone doing interactive media work, by R. Shams Mortier.  
 ALSO: And furthermore: The Amiga takes the stage in the Broadway production of The Who's Tommy!

Vol.9, No.4, April 1994

Highlights Include:

"Computer Cafe Serves Up Shasta", The design team at Computer Cafe creates incredible "can-a-mation" for a beverage commercial, by Robert Van Buren.  
 "Aladdin 4D Review," Comprehensive look at the latest version of Aladdin, by R. Shams Mortier.  
 "AGA Chipset and the Amiga: CD32 to the Rescue!" What does the future hold for CD32 and Amiga games? Jeff James has the inside scoop, by Jeff James.  
 "Sync Tips," Video returns to the pages of AC, featuring Oran Sands.  
 ALSO: Exclusive interview with renowned Amiga artist Jim Sachs.

Vol.9, No.5, May 1994

Highlights Include:

"Desktop Publishing for Profit", Resume design: A simple and profitable way to break into the desktop publishing field, by Dan Weiss.  
 "24-bit Painting Techniques," Innovative tips and tricks anyone can use to make their computer paintings look better, by Mark Hoffman.  
 "PD Update," This month, MegaBall 3.0, Motorola Invaders, New World, and more, by Henning Vahlenkamp.  
 "MicroBotics MBX-1200Z," A review of this handy math coprocessor and 32-bit RAM add-on card for the Amiga 1200, by Rob Hays.  
 ALSO: The long-awaited Amiga 4000 Tower is showcased at the Cebit show in Germany.

Vol.9, No.6, June 1994

Highlights Include:

"CanDo," Select, enter, and play music files, by Randy Finch.  
 "NAB show report," AC travels to Las Vegas for the latest releases and announcements.  
 "Making an Article Database," Create a simple database to keep track of magazine articles using the HELM authoring system, by Doug Nakakihara.  
 "A Survival Guide to CD-ROM Part I," The first in a four part series designed to take the confusion out of CD-ROM devices, by Mark Ricken.  
 "Bubbles vs Heat," Fargo's Primera Color Printer & Canon's BJC-600, by Dvinn Craig.  
 "1994 Reader's Choice Awards Ballot".  
 "TypeSmith 2.0," Review, by Merrill Callaway.  
 "The A 64 Package 3.0," This new release brings quality C64 emulation to the Amiga, by Henning Vahlenkamp.  
 "MIDIquest 4.5 & TECHquest," Review, by Shams Mortier.





# AC's TECH

AC's TECH, Vol. 3, No. 2

Highlights Include:

"Ole," An arcade game programmed in AMOS BASIC, by Thomas J. Eshelman.  
 "Programming the Amiga in Assembly Language Part 6," by William Nee  
 "Wrapped Up with True BASIC," Text and Graphics wrapping modules in True BASIC, by Dr. Roy M. Nuzzo  
 "ARexx Disk Cataloger," An AmigaDOS manipulator that produces a text file containing information about the floppy disks you want cataloged, by T. Darrel Westbrook  
**AND LOTS MORE ON DISK!**

AC's TECH, Vol. 3, No. 3

Highlights Include:

"Rexx Rainbow Library," A review by Merrill Callaway  
 "All You Ever Wanted to Know About Morphing," An in-depth look at morphing for Imagine by Bruno Costa and Lucia Darsa  
 "Custom 3D Graphics Package Part I," Designing a custom 3D graphics package by Laura Morisson.  
 "Build a Second Joystick Port," A simple hardware project for an additional joystick port by Jacques Hallee.  
**AND LOTS MORE ON DISK!**

AC's TECH, Vol. 3, No. 4

Highlights Include:

"Custom 3D Graphics Package Part II," Put the finishing touches on your own graphics package by Laura Morisson.  
 "TrueBASIC Input Mask," An interesting TrueBASIC utility by T. Darrel Westbrook.  
 "Time Efficient Animations," Make up for lost time with this great animation utility by Robert Galka.  
 "F-BASIC 5.0," A review of this latest version of F-BASIC by Jeff Stein.  
**PLUS: CD32 Development Info!**

AC's TECH, Vol. 4, No. 1

Highlights Include:

"Artificial Life," Artificial life, intelligence and other technical tidbits in this piece, by John Iovine.  
 "Huge Numbers Part I," Creative number crunching, by Michael Greibling.  
 "Pseudo-random Number Generation," Generating sequences of random numbers—almost, by Christopher Jennings.  
 "Draw 5.0," Door prize selection in AMOS Professional, by T. Darrel Westbrook.  
 "Programming the Amiga in Assembly Language," Complex functions are explored, by William P. Nee.  
 "Writing a Function Genie for Pro Draw," Create a calendar beginning October 1582, by Keith D. Brown.

AC's TECH, Vol. 4, No. 2

Highlights Include:

"True F-BASIC," What do you get when you cross True BASIC with F-BASIC? You'll be surprised, by Roy M. Nuzzo.  
 "Huge Numbers Part II," Creative number crunching, by Michael Greibling.  
 "Building an Audio Digitizer," Create a simple audio digitizer for your Amiga, by John Iovine.  
 "A Look at Compression," Various compression techniques and what they do for you, by Dan Weiss.  
 "Programming the Amiga in Assembly Language," Using the math coprocessor, by William P. Nee.  
 "AmigaDOS Shared Libraries," Examining AmigaDOS libraries and their functions, by Daniel Stenberg.

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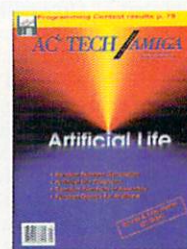
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**SEE PAGE 72 FOR DETAILS**

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Or if you're a programmer or technical type, do you understand how to add 512K RAM to your 1MB A500 for a cost of only \$30? Or how to program the Amiga's GUI in C? Would you like the instructions for building your own variable rapid-fire joystick or a 246-grayscale SCSI interface for your Amiga? Do you use easy routines for performing floppy access without the aid of the operating system? How much do you really understand about ray tracing?

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# And furthermore...

## TCF'94

### The Trenton Computer Festival

Although the 19th Annual Trenton Computer Festival was not completely Amiga-oriented, it did have plenty to offer the Amiga user. Held on the weekend of April 16-17 at Mercer County Community College in New Jersey, TCF is the world's oldest personal computer show. It began in 1975 at Trenton State College as a joint effort between the Engineering Department and the Amateur Computer Group of NJ before moving to MCCC in 1990. Today TCF is a huge show sponsored by many organizations, with about 20,000 visitors annually.

TCF is comprised of three basic parts: indoor, commercial, and noncommercial exhibitors; an outdoor flea market; and seminars. This year's 225 exhibitors included many industry leaders such as IBM and Microsoft. Unfortunately, Gold Disk, the only commercial Amiga developer present, didn't show any of its Amiga products. On the other hand, with 1000 vendors ranging from retailers to individuals selling their own used computer equipment, the flea market catered to just about any computer platform or format imaginable. In fact, I saw two Amiga public domain vendors, several people selling Amiga software, and even two A1000s for sale - one a bare unit and the other a loaded system with many accessories. As always, many bargains and buried treasures were waiting to be found both outdoors and indoors.

The 130 seminars discussed many different computer topics including general interest ones such as Internet, freely distributable software, making money with your computer, and a keynote address by Steven Levy, author of the classic novel *Hackers: Heroes of the Computer Revolution*. Levy reflected on the development of the Macintosh and touched on the new PowerPC chip.

Although past shows have had seminars on the Video Toaster and an introduction to the Amiga, the only Amiga-specific one this year was the users group meeting. Nevertheless, this well-attended meeting is probably the highlight of the show for Amiga users. Eric Lavitsky, an Amiga developer and co-founder of the Jersey Amiga Users Group, was on hand to discuss Commodore and the future of the Amiga, and to demonstrate the new CD<sup>32</sup> game machine. Eric also awarded CD<sup>32</sup> posters in a free raffle.

Lavitsky cautioned not to put too much faith in the numerous rumors circulating in the Amiga community (AAA development has NOT been cancelled). Furthermore, according to Lavitsky, CD ROM peripherals for the A1200 and A4000 do exist although no release dates have been set for them or for AmigaDOS 3.1. The CD<sup>32</sup> demonstration featured the games Microcosm and The Labyrinth of Time, CD audio, CD+G, and the Video CDs *Top Gun* and *Star Trek VI* using Commodore's MPEG Full Motion Video adapter. Lavitsky also mentioned Microbotics' upcoming CD<sup>32</sup> expansion device that will include floppy, RGB, IDE, serial, and parallel ports.

That wraps up this year's show. Even though TCF is no WOCA, it was still a worthwhile event for Amiga users. At \$8 for general admission to everything, TCF is hard to pass up, especially if you're in the New Jersey area.

•AC•

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Somerset, NJ 08875  
(908) 560-0114  
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The Trenton Computer Festival offers something for everyone. From the Amiga Users Group meeting (Top) to the commercial vendor exhibits (Middle) and the outdoor flea market (Bottom) Amiga users as well as others can find information, values, and more.



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166	167	168	169	170	286	287	288	289	290
171	172	173	174	175	291	292	293	294	295
176	177	178	179	180	296	297	298	299	300
181	182	183	184	185	301	302	303	304	305
186	187	188	189	190	306	307	308	309	310
191	192	193	194	195	311	312	313	314	315
196	197	198	199	200	316	317	318	319	320
201	202	203	204	205	321	322	323	324	325
206	207	208	209	210	326	327	328	329	330
211	212	213	214	215	331	332	333	334	335
216	217	218	219	220	336	337	338	339	340

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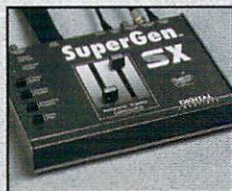
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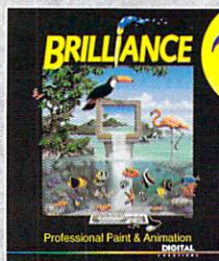
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**2.0**

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# The Reviews are in...

"The program is so fast and flexible that it makes its Amiga predecessors feel like the old Doodle! program on the Commodore 64. Nothing out there can match its feature set, and it's the one paint program I've used that's so fast that it never gets in the way of your creativity."

**Amiga Computing,**  
October 1993 (UK)

"Brilliance is now — leaving DPaint trailing in its wake — the best art package available for the Amiga. It's very hard to express why I'm so taken by Brilliance, there's just a feeling of 'rightness' about the way that it works."

**C U Amiga,**  
October 1993 (UK)



"Excellent! Brilliance is loaded with useful drawing and animation features, but it's not just the sheer number of tools on offer that impresses. Two other big points arise. First, the program is very easy to use, thanks to its intuitive, flexible and well thought-out panel system. The second major factor is Brilliance's speed. Even in HAM-8 mode, everything zips along beautifully quickly."

**Amiga Format,**  
October 1993 (UK)

"Brilliance is user friendly, doing an excellent job with nearly every function and option that it offers..."

**AmigaWorld,**  
December 1993 (USA)

"It is solid as a rock. Never have I known a first version of any program stand up like this or be so perfectly polished."

**Amiga Shopper,**  
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## ...Brilliance kicked Tut's Butt!

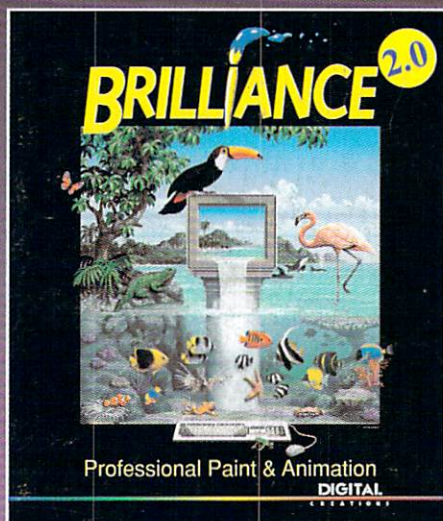


**COMPARE!** Deluxe Paint IV Vs. Brilliance

	Slow	Fast
Overall Speed		
Picture Size Limited By:		
Chip RAM	Yes	No
Total RAM	N/A	Yes
Number of Brushes		29
Number of Anim Brushes	2	9
Number of Screens	2	Lots*
Levels of Undo	1	Lots*
Levels of Redo	1	Lots*
Load/Save Paths	Yes	Yes
Flip Frames	No	Yes
Realtime Preview Mode	No	Yes
Full Screen HAM Gradient Fill	Slow	Fast
Max # of Colors Gradient Fill	16	30,000
True 24 Bit Editing	No	Yes
Load DCTV Pics as HAM	No	Yes
Max Animation Speed	30fps	99fps
Ground-up Design for AGA	No	Yes
* Limited only by total RAM		

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